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Permit Number: AR0001210
AFIN: 02-00013

AUTHORIZATION TO DISCHARGE WASTEWATER UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM AND THE ARKANSAS WATER AND AIR POLLUTION CONTROL ACT

In accordance with the provisions of the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. 8-4-101 et seq.), and the Clean Water Act (33 U.S.C. § 1251 et seq.),

Georgia-Pacific Crossett LLC
Crossett Paper Operations

is authorized to discharge process wastewater (Pulp and Paper Mill, Plywood Plant and Studmill, and Chemical Plant operations including, but not limited to, truck wash wastewater, backwash wastewater, and product stewardship waters), sanitary wastewater, landfill leachate, site stormwater, and treated effluent from the City of Crossett from a facility located as follows: west on Hwy 82 from the paper mill, go 1 mile before turning left onto Texas Ave. Go 2 miles then turn right. Proceed until you come to a T in the road, noting where the primary clarifier is located in Ashley County, Arkansas. The applicant's mailing address and physical location is: 100 Mill Supply Road, Crossett, AR 71635.

Latitude: 33° 08' 30"; Longitude: 91° 58' 12"

The receiving waters named:

Outfall 001: through a man-made channel to the upper reaches of Mossy Lake, then into Coffee Creek, then into Ouachita River in Segment 2D of the Ouachita River Basin.

SMS 002: At the transition from Mossy Lake to Coffee Creek then into Ouachita River in Segment 2D of the Ouachita River Basin.

The outfalls are located at the following coordinates:

Outfall 001: Latitude : 33E 06' 22.55"; Longitude: 92E 02' 17.2"

SMS 002: Latitude : 33E 01' 58"; Longitude: 92E 04' 25"

Internal Outfall 101: Latitude : 33E 08' 29.5"; Longitude: 91E 58' 25.8"

Internal Outfall 102: Latitude : 33E 08' 29.5"; Longitude: 91E 58' 25.8"

Internal Outfall 103: Latitude : 33E 08' 29.5"; Longitude: 91E 58' 25.8"

Discharge shall be in accordance with effluent limitations, monitoring requirements, and other conditions set forth in this permit. Per Part III.D.10, the permittee must re-apply 180 days prior to the expiration date below for permit coverage to continue beyond the expiration date.

Effective Date:

Expiration Date:

Caleb J. Osborne
Associate Director, Office of Water Quality
Arkansas Department of Environmental Quality

Issue Date

PART I PERMIT REQUIREMENTS

SECTION A. INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS: OUTFALL 001 – Process wastewater (Pulp and Paper Mill, Plywood Plant and Studmill, and Chemical Plant operations including, but not limited to, truck wash wastewater, backwash wastewater, and product stewardship waters), sanitary wastewater, landfill leachate, site stormwater, and treated effluent from the City of Crossett.

During the period beginning on the effective date and lasting three years, the permittee is authorized to discharge from Outfall 001. Such discharges shall be limited and monitored by the permittee as specified below.

Effluent Characteristics	Discharge Limitations				Monitoring Requirements	
	Mass (lbs/day, unless otherwise specified)		Concentration (mg/l, unless otherwise specified)		Frequency	Sample Type
	Monthly Avg.	Daily Max	Monthly Avg.	Daily Max		
Flow (MGD)	N/A	N/A	Report	Report	Daily	Totalizing Meter
Biochemical Oxygen Demand (BOD5)	24155.4	46453.0	64.4	123.8	Three/week	24-hr composite
Total Suspended Solids (TSS)	37720	70188	119.6	222.4	Three/week	24-hr composite
2,3,7,8-TCDD ⁴	Report	Report	Report pg/l	Report pg/l	Once/quarter	24-hr composite
Adsorbable Organic Halogens (AOX) ²	2146	3276	N/A	N/A	Three/week	24-hr composite
Total Recoverable Copper ⁵	7.04	14.12	18.75 µg/l	37.62 µg/l	Once/month	24-hr composite ⁶
Total Recoverable Zinc ⁵	73.02	146.52	194.58 µg/l	390.41 µg/l	Once/month	24-hr composite ⁶
Total Phosphorus	Report	Report	Report	Report	Once/month	24-hr composite
Total Dissolved Iron	Report	Report	Report µg/l	Report µg/l	Once/month ⁷	24-hr composite ⁶
Nitrates as Nitrogen	Report	Report	Report	Report	Once/month	24-hr composite
pH	N/A	N/A	Minimum 6.0 s.u.	Maximum 9.0 s.u.	Three/week	Grab
Chronic Whole Effluent Toxicity						
<u>Pimephales promelas (Chronic)³</u> Pass/Fail Lethality (7-day NOEC) TLP6C Pass/Fail Growth (7-day NOEC)TGP6C Survival (7-day NOEC) TOP6C Coefficient of Variation, Growth TQP6C Growth (7-day NOEC) TPP6C Pass/Fail Retest 1 (7-day NOEC) 22418 Pass/Fail Retest 2 (7-day NOEC) 22419 Pass/Fail Retest 3 (7-day NOEC) 51444			Report (Pass=0/Fail=1) Report (Pass=0/Fail=1) Report % Report % Report % Report (Pass=0/Fail=1) Report (Pass=0/Fail=1) Report (Pass=0/Fail=1)	Once/2 months Once/2 months Once/2 months Once/2 months Once/2 months Once/month ⁸ Once/month ⁸ Once/month ⁸	24-hr composite 24-hr composite 24-hr composite 24-hr composite 24-hr composite 24-hr composite 24-hr composite 24-hr composite	
<u>Ceriodaphnia dubia (Chronic)³</u> Pass/Fail Lethality (7-day NOEC) TLP3B Pass/Fail production (7-day NOEC)TGP3B Survival (7-day NOEC) TOP3B Coefficient of Variation, Reproduction TQP3B Reproduction (7-day NOEC) TPP3B Pass/Fail Retest 1 (7-day NOEC) 22415 Pass/Fail Retest 2 (7-day NOEC) 22416 Pass/Fail Retest 3 (7-day NOEC) 51443			Report (Pass=0/Fail=1) Report (Pass=0/Fail=1) Report % Report % Report % Report (Pass=0/Fail=1) Report (Pass=0/Fail=1) Report (Pass=0/Fail=1)	Once/2 months Once/2 months Once/2 months Once/2 months Once/2 months Once/month ⁸ Once/month ⁸ Once/month ⁸	24-hr composite 24-hr composite 24-hr composite 24-hr composite 24-hr composite 24-hr composite 24-hr composite	

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- ¹ See Condition No. 15 of Part II (BMP Requirements).
 - ² See Condition No. 8 of Part II (AOX Test Method).
 - ³ See Condition No. 22 of Part II (WET Testing Requirements).
 - ⁴ See Condition No. 7 of Part II (Dioxin Monitoring Requirements).
 - ⁵ See Condition No. 14 of Part II (Metals Test Methods). Monitoring is required only when **Mossy Lake is flooded**. A flooded state is defined as the period when the gauge at the Felsenthal Lock and Dam exceeds 62 feet and also for the two weeks following the recession of flood waters below 62 feet.
 - ⁶ The 24-hr composite sample may consist of four grab samples taken over 24 hours and flow weighted. See Part IV, Item #8.
 - ⁷ During months in which WET testing is required, the permittee must sample the effluent for Total Dissolved Iron whenever a sample for WET testing is taken.
 - ⁸ **CONDITIONAL REPORTING:** Use only if conducting retests due to a test failure (demonstration of significant toxic effects at or below the critical dilution). If testing on a once per two months basis, the permittee may substitute one of the retests in lieu of one scheduled toxicity tests. If retests are not required, Report NODI=9 (Conditional Monitoring - Not Required This Period) under retest parameters.
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There shall be no discharge of distinctly visible solids, scum, or foam of a persistent nature, nor shall there be any formation of slime, bottom deposits, or sludge banks.

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge during the entire monitoring period. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: following the final treatment unit (aeration basin) at Latitude : 33E 06' 22.5"; Longitude: 92E 02' 17.2".

PART I PERMIT REQUIREMENTS

SECTION A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS: OUTFALL 001 – Process wastewater (Pulp and Paper Mill, Plywood Plant and Studmill, and Chemical Plant operations including, but not limited to, truck wash wastewater, backwash wastewater, and product stewardship waters), sanitary wastewater, landfill leachate, site stormwater, and treated effluent from the City of Crossett.

During the period beginning on three years from the effective date and lasting until the date of expiration, the permittee is authorized to discharge from Outfall 001. Such discharges shall be limited and monitored by the permittee as specified below.

<u>Effluent Characteristics</u>	<u>Discharge Limitations</u>				<u>Monitoring Requirements</u>	
	Mass (lbs/day, unless otherwise specified)		Concentration (mg/l, unless otherwise specified)		Frequency	Sample Type
	Monthly Avg.	Daily Max	Monthly Avg.	Daily Max		
Flow (MGD)	N/A	N/A	Report	Report	Daily	Totalizing Meter
Biochemical Oxygen Demand (BOD5)	24155.4	46453.0	64.4	123.8	Three/week	24-hr composite
Total Suspended Solids (TSS)	37720	70188	119.6	222.4	Three/week	24-hr composite
2,3,7,8-TCDD ⁴	Report	Report	Report pg/l	Report pg/l	Once/quarter	24-hr composite
Adsorbable Organic Halogens (AOX) ²	2146	3276	N/A	N/A	Three/week	24-hr composite
Total Recoverable Copper ⁵	7.04	14.12	18.75 µg/l	37.62 µg/l	Once/month	24-hr composite ⁶
Total Recoverable Zinc ⁵	73.02	146.52	194.58 µg/l	390.41 µg/l	Once/month	24-hr composite ⁶
Total Phosphorus	Report	Report	Report	Report	Once/month	24-hr composite
Total Dissolved Iron	Report	Report	Report µg/l	Report µg/l	Once/month ⁷	24-hr composite ⁶
Nitrates as Nitrogen	Report	Report	Report	Report	Once/month	24-hr composite
pH	N/A	N/A	<u>Minimum</u> 6.0 s.u.	<u>Maximum</u> 9.0 s.u.	Three/week	Grab
Chronic Whole Effluent Toxicity						
<i>C. dubia</i> Limit (51710)			Not < 80%		Once/2 months	24-hr composite
<u>Pimephales promelas (Chronic)</u>³ Pass/Fail Lethality (7-day NOEC) TLP6C Pass/Fail Growth (7-day NOEC)TGP6C Survival (7-day NOEC) TOP6C Coefficient of Variation, Growth TQP6C Growth (7-day NOEC) TPP6C Pass/Fail Retest 1 (7-day NOEC) 22418 Pass/Fail Retest 2 (7-day NOEC) 22419 Pass/Fail Retest 3 (7-day NOEC) 51444			Report (Pass=0/Fail=1) Report (Pass=0/Fail=1) Report % Report % Report % Report (Pass=0/Fail=1) Report (Pass=0/Fail=1) Report (Pass=0/Fail=1)		Once/2 months Once/2 months Once/2 months Once/2 months Once/2 months Once/month ⁹ Once/month ⁹ Once/month ⁹	24-hr composite 24-hr composite 24-hr composite 24-hr composite 24-hr composite 24-hr composite 24-hr composite 24-hr composite
<u>Ceriodaphnia dubia (Chronic)</u>⁸ Pass/Fail Lethality (7-day NOEC) TLP3B Pass/Fail production (7-day NOEC)TGP3B Survival (7-day NOEC) TOP3B Coefficient of Variation, Reproduction TQP3B Reproduction (7-day NOEC) TPP3B			Report (Pass=0/Fail=1) Report (Pass=0/Fail=1) Report % Report % Report %		Once/2 months Once/2 months Once/2 months Once/2 months Once/2 months	24-hr composite 24-hr composite 24-hr composite 24-hr composite 24-hr composite

- ¹ See Condition No. 15 of Part II (BMP Requirements).
 - ² See Condition No. 8 of Part II (AOX Test Method).
 - ³ See Condition No. 22 of Part II (WET Testing Requirements).
 - ⁴ See Condition No. 7 of Part II (Dioxin Monitoring Requirements).
 - ⁵ See Condition No. 14 of Part II (Metals Test Methods). Monitoring is required only when **Mossy Lake is flooded**. A flooded state is defined as the period when the gauge at the Felsenthal Lock and Dam exceeds 62 feet and also for the two weeks following the recession of flood waters below 62 feet.
 - ⁶ The 24-hr composite sample may consist of four grab samples taken over 24 hours and flow weighted. See Part IV, Item #8.
 - ⁷ During months in which WET testing is required, the permittee must sample the effluent for Total Dissolved Iron whenever a sample for WET testing is taken.
 - ⁸ See Condition No. 25 of Part II (WET Limit Requirements).
 - ⁹ **CONDITIONAL REPORTING:** Use only if conducting retests due to a test failure (demonstration of significant toxic effects at or below the critical dilution). If testing on a once per two months basis, the permittee may substitute one of the retests in lieu of one scheduled toxicity tests. If retests are not required, Report NODI=9 (Conditional Monitoring - Not Required This Period) under retest parameters.
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There shall be no discharge of distinctly visible solids, scum, or foam of a persistent nature, nor shall there be any formation of slime, bottom deposits, or sludge banks.

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge during the entire monitoring period. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: following the final treatment unit (aeration basin) at Latitude : 33E 06' 22.5"; Longitude: 92E 02' 17.2".

PART I PERMIT REQUIREMENTS

SECTION A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS: Stream Monitoring Station (SMS) 002 – At the Transition from Mossy Lake to Coffee Creek.

During the period beginning on the effective date of this permit and lasting until the date of expiration, the permittee is authorized to discharge from serial number SMS 002. Such discharges shall be limited and monitored by the permittee as specified below.

<u>Effluent Characteristics</u>	<u>Discharge Limitations</u>				<u>Monitoring Requirements¹</u>	
	Mass (lbs/day, unless otherwise specified)		Concentration (mg/l, unless otherwise specified)		Frequency	Sample Type
	Monthly Avg.	Daily Max	Monthly Avg.	Daily Max		
Flow (MGD)	N/A	N/A	Report	Report	Daily	Totalizing Meter
Biochemical Oxygen Demand (BOD5)						
October – July	8000	12000	Report	Report	Three/week	24-hr composite ⁴
August	7262	10893	Report	Report	Three/week	24-hr composite ⁴
September	5911	8867	Report	Report	Three/week	24-hr composite ⁴
Total Suspended Solids (TSS)	18000	30000	Report	Report	Three/week	24-hr composite ⁴
Total Recoverable Copper ²	7.04	14.12	18.75 µg/l	37.62 µg/l	Once/month	Grab
Total Recoverable Zinc ²	73.02	146.52	194.58 µg/l	390.41 µg/l	Once/month	Grab
Total Phosphorous	Report	Report	Report	Report	Once/month	24-hr composite ⁴
Nitrates as Nitrogen	Report	Report	Report	Report	Once/month	24-hr composite ⁴
Change in Receiving Stream Color ³	N/A	N/A	N/A	Report ³	Once/quarter	Grab
pH	N/A	N/A	<u>Minimum</u> 6.0 s.u.	<u>Maximum</u> 9.0 s.u.	Three/week	Grab

¹ **When Mossy Lake is not flooded.** A flooded state is defined as the period when the gauge at the Felsenthal Lock and Dam exceeds 62 feet and also for the two weeks following the recession of flood waters below 62 feet.

² See Condition No. 14 of Part II (Metals Test Methods).

³ See Condition No. 16 of Part II.

⁴ Samples shall be time-proportional composites. The permittee must collect a fixed volume of discrete sample aliquots in one container at constant time intervals by mixing a minimum of 4 effluent portions collected at equal time intervals (but not closer than one hour apart) within a 24-hr period.

There shall be no discharge of distinctly visible solids, scum, or foam of a persistent nature, nor shall there be any formation of slime, bottom deposits, or sludge banks.

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge during the entire monitoring period. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: at the SMS 002, after Mossy Lake and prior to Coffee Creek at the flow measurement structure at the following coordinates: Latitude : 33E 01' 58"; Longitude: 92E 04' 25".

PART I PERMIT REQUIREMENTS

SECTION A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS: Internal Outfall 101 – Line 1A of Hardwood Effluent.

During the period beginning on the effective date and lasting until the date of expiration, the permittee is authorized to discharge from internal Outfall 101. Such discharges shall be limited and monitored by the permittee as specified below.

<u>Effluent Characteristics</u>	<u>Discharge Limitations</u>				<u>Monitoring Requirements</u>	
	Mass (lbs/day, unless otherwise specified)		Concentration (µg/l, unless otherwise specified)		Frequency	Sample Type ²
	Monthly Avg.	Daily Max	Monthly Avg.	Daily Max		
Flow (MGD)	N/A	N/A	Report	Report	Daily	Calculated ³
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) ¹	N/A	N/A	N/A	<10 pg/l	Once/quarter	24-hr composite
2,3,7,8-Tetrachlorodibenzofuran (TCDF) ¹	N/A	N/A	N/A	31.9 pg/l	Once/quarter	24-hr composite
Trichlorosyringol ¹	N/A	N/A	N/A	<2.5	Once/quarter	24-hr composite
3,4,5-Trichlorocatechol ¹	N/A	N/A	N/A	<5.0	Once/quarter	24-hr composite
3,4,6-Trichlorocatechol ¹	N/A	N/A	N/A	<5.0	Once/quarter	24-hr composite
3,4,5-Trichloroguaiacol ¹	N/A	N/A	N/A	<2.5	Once/quarter	24-hr composite
3,4,6-Trichloroguaiacol ¹	N/A	N/A	N/A	<2.5	Once/quarter	24-hr composite
4,5,6-Trichloroguaiacol ¹	N/A	N/A	N/A	<2.5	Once/quarter	24-hr composite
2,4,5-Trichlorophenol ¹	N/A	N/A	N/A	<2.5	Once/quarter	24-hr composite
2,4,6-Trichlorophenol ¹	N/A	N/A	N/A	<2.5	Once/quarter	24-hr composite
Tetrachlorocatechol ¹	N/A	N/A	N/A	<5.0	Once/quarter	24-hr composite
Tetrachloroguaiacol ¹	N/A	N/A	N/A	<5.0	Once/quarter	24-hr composite
2,3,4,6-Tetrachlorophenol ¹	N/A	N/A	N/A	<2.5	Once/quarter	24-hr composite
Pentachlorophenol ¹	N/A	N/A	N/A	<5.0	Once/quarter	24-hr composite
Chloroform	4.78	7.99	Report	Report	Once/2 months	24-hr composite

¹ See Condition No. 8 of Part II (Test Method Requirements).

² The 24-hr composite samples may consist of a minimum of four effluent portions collected at equal time intervals (but not closer than one hour apart) within a 24-hour period.

³ See Part IB and Condition No. 24 of Part II (Flow Calculation Methodology).

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge during the entire monitoring period. Samples taken in compliance with monitoring requirements specified above shall be taken at the following location: internal outfall 101 (Line 1A – Hardwood) at Latitude : 33E 08' 29.5"; Longitude: 91E 58' 25.8" and prior to commingling with other waste streams.

PART I PERMIT REQUIREMENTS

SECTION A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS: Internal Outfall 102 – Line 1B of Hardwood Effluent.

During the period beginning on the effective date and lasting until the date of expiration, the permittee is authorized to discharge from internal Outfall 102. Such discharges shall be limited and monitored by the permittee as specified below.

<u>Effluent Characteristics</u>	<u>Discharge Limitations</u>				<u>Monitoring Requirements</u>	
	Mass (lbs/day, unless otherwise specified)		Concentration (µg/l, unless otherwise specified)		Frequency	Sample Type ²
	Monthly Avg.	Daily Max	Monthly Avg.	Daily Max		
Flow (MGD)	N/A	N/A	Report	Report	Daily	Calculated ³
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) ¹	N/A	N/A	N/A	<10 pg/l	Once/quarter	24-hr composite
2,3,7,8-Tetrachlorodibenzofuran (TCDF) ¹	N/A	N/A	N/A	31.9 pg/l	Once/quarter	24-hr composite
Trichlorosyringol ¹	N/A	N/A	N/A	<2.5	Once/quarter	24-hr composite
3,4,5-Trichlorocatechol ¹	N/A	N/A	N/A	<5.0	Once/quarter	24-hr composite
3,4,6-Trichlorocatechol ¹	N/A	N/A	N/A	<5.0	Once/quarter	24-hr composite
3,4,5-Trichloroguaiacol ¹	N/A	N/A	N/A	<2.5	Once/quarter	24-hr composite
3,4,6-Trichloroguaiacol ¹	N/A	N/A	N/A	<2.5	Once/quarter	24-hr composite
4,5,6-Trichloroguaiacol ¹	N/A	N/A	N/A	<2.5	Once/quarter	24-hr composite
2,4,5-Trichlorophenol ¹	N/A	N/A	N/A	<2.5	Once/quarter	24-hr composite
2,4,6-Trichlorophenol ¹	N/A	N/A	N/A	<2.5	Once/quarter	24-hr composite
Tetrachlorocatechol ¹	N/A	N/A	N/A	<5.0	Once/quarter	24-hr composite
Tetrachloroguaiacol ¹	N/A	N/A	N/A	<5.0	Once/quarter	24-hr composite
2,3,4,6-Tetrachlorophenol ¹	N/A	N/A	N/A	<2.5	Once/quarter	24-hr composite
Pentachlorophenol ¹	N/A	N/A	N/A	<5.0	Once/quarter	24-hr composite
Chloroform	4.78	7.99	Report	Report	Once/2 months	24-hr composite

¹ See Condition No. 8 of Part II (Test Method Requirements).

² The 24-hr composite samples may consist of a minimum of four effluent portions collected at equal time intervals (but not closer than one hour apart) within a 24-hour period.

³ See Part IB and Condition No. 24 of Part II (Flow Calculation Methodology).

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge during the entire monitoring period. Samples taken in compliance with monitoring requirements specified above shall be taken at the following location: internal outfall 102 (Line 1B – Hardwood) at Latitude : 33E 08' 29.5"; Longitude: 91E 58' 25.8" and prior to commingling with other waste streams.

PART I PERMIT REQUIREMENTS

SECTION A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS: Internal Outfall 103 – Line 2 of Softwood Effluent.

During the period beginning on the effective date and lasting until the date of expiration, the permittee is authorized to discharge from internal Outfall 103. Such discharges shall be limited and monitored by the permittee as specified below.

<u>Effluent Characteristics</u>	<u>Discharge Limitations</u>				<u>Monitoring Requirements</u>	
	Mass (lbs/day, unless otherwise specified)		Concentration (µg/l, unless otherwise specified)		Frequency	Sample Type ²
	Monthly Avg.	Daily Max	Monthly Avg.	Daily Max		
Flow (MGD)	N/A	N/A	Report	Report	Daily	Calculated ³
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) ¹	N/A	N/A	N/A	<10 pg/l	Once/quarter	24-hr composite
2,3,7,8-Tetrachlorodibenzofuran (TCDF) ¹	N/A	N/A	N/A	31.9 pg/l	Once/quarter	24-hr composite
Trichlorosyringol ¹	N/A	N/A	N/A	<2.5	Once/quarter	24-hr composite
3,4,5-Trichlorocatechol ¹	N/A	N/A	N/A	<5.0	Once/quarter	24-hr composite
3,4,6-Trichlorocatechol ¹	N/A	N/A	N/A	<5.0	Once/quarter	24-hr composite
3,4,5-Trichloroguaiacol ¹	N/A	N/A	N/A	<2.5	Once/quarter	24-hr composite
3,4,6-Trichloroguaiacol ¹	N/A	N/A	N/A	<2.5	Once/quarter	24-hr composite
4,5,6-Trichloroguaiacol ¹	N/A	N/A	N/A	<2.5	Once/quarter	24-hr composite
2,4,5-Trichlorophenol ¹	N/A	N/A	N/A	<2.5	Once/quarter	24-hr composite
2,4,6-Trichlorophenol ¹	N/A	N/A	N/A	<2.5	Once/quarter	24-hr composite
Tetrachlorocatechol ¹	N/A	N/A	N/A	<5.0	Once/quarter	24-hr composite
Tetrachloroguaiacol ¹	N/A	N/A	N/A	<5.0	Once/quarter	24-hr composite
2,3,4,6-Tetrachlorophenol ¹	N/A	N/A	N/A	<2.5	Once/quarter	24-hr composite
Pentachlorophenol ¹	N/A	N/A	N/A	<5.0	Once/quarter	24-hr composite
Chloroform	4.81	8.04	Report	Report	Once/2 months	24-hr composite

¹ See Condition No. 8 of Part II (Test Method Requirements).

² The 24-hr composite samples may consist of a minimum of four effluent portions collected at equal time intervals (but not closer than one hour apart) within a 24-hour period.

³ See Part IB and Condition No. 24 of Part II (Flow Calculation Methodology).

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge during the entire monitoring period. Samples taken in compliance with monitoring requirements specified above shall be taken at the following location: internal outfall 103 (Line 2 – Softwood) at Latitude : 33E 08' 29.5"; Longitude: 91E 58' 25.8" and prior to commingling with other waste streams.

SECTION B. PERMIT COMPLIANCE SCHEDULE

1. Within 60 days of the effective date of this permit, the permittee must submit a detailed methodology for calculating the flows at Internal Outfalls 101, 102, and 103. (See Part II, Condition No. 22 for additional requirements).
2. Compliance with the final effluent limitations for *C. dubia* WET is required three years after the effective date of the permit. The permittee shall submit progress reports addressing the progress towards attaining the Final Effluent Limitations for the aforementioned parameters according to the following schedule:

ACTIVITY

DUE DATE

Progress Report^{1, 2}

One (1) year from effective date

Progress Report^{1, 3}

Two (2) years from effective date

Achieve Final Compliance^{1, 4}

Three (3) years from effective date

All progress reports must be submitted to the Department at the following address:

Enforcement Branch
Office of Water Quality
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118-5317

¹ If the permittee is already in compliance with a final permit limit, only documentation demonstrating compliance with the final limit will be required for the progress report.

² If the permittee is not in compliance with the final limitation for *C. dubia* WET following one (1) year of sampling, the initial Progress Report must detail how the permittee plans to come into compliance with the final limits within the remaining 2 years of the interim period. Options must be provided that were considered along with which option* was selected. Any Best Management Practices (BMPs) that have been instituted to reduce the *C. dubia* toxicity in the influent must also be discussed. If a study will be performed, a milestone schedule for the study must be provided.

* The permittee has the option to undertake any study deemed necessary to meet the final limitations during the interim period. Any additional treatment (including chemical addition) must be approved and construction approval granted prior to final installation.

³ The second Progress Report must contain an update on the status of the chosen option from the initial Progress Report. If the facility is not meeting any of the milestones provided in

the initial Progress Report, the facility must update the milestone schedule to show how the final limits will be met by the deadline.

- ⁴ A final Progress Report must be submitted no later than 30 days following the final compliance date and include a certification that the final effluent limits were met on the effective date and that the limits are still being met.

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PART II OTHER CONDITIONS

1. Reserved.
2. The operator of this wastewater treatment facility shall hold an Advanced Industrial license from the State of Arkansas in accordance with APCEC Regulation No. 3.
3. In accordance with 40 CFR Parts 122.62 (a)(2) and 124.5, this permit may be reopened for modification or revocation and/or reissuance to require additional monitoring and/or effluent limitations when new information is received that actual or potential exceedance of State water quality criteria and/or narrative criteria are determined to be the result of the permittee's discharge(s) to a relevant water body or a Total Maximum Daily Load (TMDL) is established or revised for the water body that was not available at the time of the permit issuance that would have justified the application of different permit conditions at the time of permit issuance.

4. Other Specified Monitoring Requirements

The permittee may use alternative appropriate monitoring methods and analytical instruments other than as specified in Part I Section A of the permit without a major permit modification under the following conditions:

- The monitoring and analytical instruments are consistent with accepted scientific practices.
- The requests shall be submitted in writing to the Permits Section of the Office of Water Quality of the ADEQ for use of the alternate method or instrument.
- The method and/or instrument is in compliance with 40 CFR Part 136, approved in accordance with 40 CFR Part 136.5, or otherwise approved by EPA.
- All associated devices are installed, calibrated, and maintained to insure the accuracy of the measurements and are consistent with the accepted capability of that type of device. The calibration and maintenance shall be performed as part of the permittee's laboratory Quality Control/Quality Assurance program.

Upon written approval of the alternative monitoring method and/or analytical instruments, these methods or instruments must be consistently utilized throughout the monitoring period. ADEQ must be notified in writing and the permittee must receive written approval from ADEQ if the permittee decides to return to the original permit monitoring requirements.

5. Reserved.

6. The Department has an MSDS on file for the nutrient blend (MacroGro GPC-30 Wastewater Nutrient Blend) which lists the Nitrogen content as 15 – 27% as N by weight and the Phosphorous content as 3 – 15% as P₂O₅ by weight. The permittee must receive written permission from the Department prior to changing the nutrient blend added to the treatment process for biological activity if the change causes the Nitrogen or Phosphorous to be outside of the listed range.

7. Dioxin Monitoring Requirements

For compliance purposes, the minimum quantification levels (MQLs) listed below or lower detection levels (DL) shall be used for monthly average and daily maximum effluent concentrations, as applicable, for listed pollutants. Test results which are less than the MQL must be reported as “NODI = Q”. Test results which are less than the DL must be reported as “NODI = B”.

Pollutant	EPA Method	MQL (Φg/l)
2,3,7,8 - TCDD	1613 or latest	0.00001

8. In accordance with 40 CFR 430.01(i) the following EPA Methods and Minimum Levels must be utilized when testing bleach plant effluent as specified for Internal Outfalls 101,102, and 103.

Pollutant	EPA Method	Minimum Level*
2,3,7,8-TCDD	1613	10 pg/l
2,3,7,8-TCDF	1613	10 pg/l
Trichlorosyringol	1653	2.5 µg/l
3,4,5-Trichlorocatechol	1653	5.0 µg/l
3,4,6-Trichlorocatechol	1653	5.0 µg/l
3,4,5-Trichloroguaiacol	1653	2.5 µg/l
3,4,6-Trichloroguaiacol	1653	2.5 µg/l
4,5,6-Trichloroguaiacol	1653	2.5 µg/l
2,4,5-Trichlorophenol	1653	2.5 µg/l
2,4,6-Trichlorophenol	1653	2.5 µg/l
Tetrachlorocatechol	1653	5.0 µg/l
Tetrachloroguaiacol	1653	5.0 µg/l
2,3,4,6-Tetrachlorophenol	1653	2.5 µg/l
Pentachlorophenol	1653	5.0 µg/l
AOX	1650	20 µg/l

*Minimum level is defined as “The level at which the analytical system gives recognizable signals and an acceptable calibration point.”

9. Specific Conditions Related to Best Management Practices Conditions

The permittee has performed all actions required by 40 CFR 430.03(j) within the time frames specified in that regulation.

The Permittee shall make the BMP Plan available at the facility for inspection by a representative of the ADEQ. The BMP Plan must contain all information outlined in 40 CFR 430.03(d) and demonstrate that the requirements of 40 CFR 430.03(c) have been implemented.

No later than May 31 of each year, the Permittee shall submit a report to the ADEQ indicating the BMP monitoring results, action level exceedances and corrective actions taken to respond to any exceedances. Exceedances are not violations of the permit. Failure to take appropriate action as soon as practicable is a permit violation. This report must contain all of the information outlined in 40 CFR 430.03(i)(4). The time frame to be covered by the report is the previous calendar year.

The Permittee shall maintain the records specified in 40 CFR 430.03(g) for a minimum of three years.

10. Permit Conditions for Accepting City of Crossett Wastewater

Georgia-Pacific and the City of Crossett (City) must maintain the agreement for the discharge of the City's treated effluent into G-P's wastewater treatment system. The agreement must continue to state that the City will have a Pretreatment Program meeting applicable parts of 40 CFR 403, and the agreement will establish treatment standards for BOD₅ and TSS for the City's treated effluent that are submitted to and approved by the ADEQ. The agreement must also continue to address the notifications that the City must provide to G-P and the ADEQ in the event of potential changes in its discharge due to new significant dischargers, or changes in their wastewater characteristics. The agreement with the City must continue to stipulate that monitoring records of the City's flow, BOD₅ and TSS will be maintained by the City for a minimum of three years to ascertain compliance with the Agreement.

11. Fish Tissue Analysis Condition

The permittee shall assess the levels of 2,3,7,8 TCDD in ambient fish tissue in the receiving stream.

A. Stations:

(Outfall) - Between the confluence of Coffee Creek & the Ouachita River and the Louisiana state line

(Background) - Upstream of Felsenthal Lock and Dam

B. Species of fish to collect

The facility shall collect a minimum of three fish from predator species and a minimum of three fish from bottom feeder species from each station. Any combination of the following is acceptable.

Buffalo, Blue catfish, Flathead catfish, Crappie, or Bass

C. Sampling time

Sampling is allowed at any time during the year. Monitoring results shall be submitted to the ADEQ within 30 days of the completion of sampling and analysis.

D. Test Frequency

Testing shall be conducted during the third year of the permit cycle. The Department reserves the right to require additional tests if the testing yields greater than 5.33 ppt of 2,3,7,8 TCDD in fish tissue. This is required only at the Outfall station as described in Item 11.A above.

E. Method of Analysis

Edible fish fillet samples shall be analyzed and reported for 2,3,7,8 TCDD. The method of analysis shall be in accordance with the latest approved procedure of Method 1613.

12. General Condition for Plant Operations

In addition to the normal wastewater discharges outlined in the effluent descriptions in Part IA, this NPDES permit authorizes discharges associated with or resulting from essential maintenance, regularly scheduled maintenance, during startup and shutdown, spills and release (whether anticipated or unanticipated) from anywhere in the permitted facility, as long as they are amenable to treatment, routed to the plant's wastewater treatment system and effluent limitations are met. In addition, discharges that are necessary to prevent loss of life, personal injury or severe property damage, as long as there are no feasible alternatives available, are also authorized by this permit, so long as effluent limitations are met.

This condition does not relieve the permittee of the responsibility to notify the Department of upset conditions as required in Part III, Section C, Condition No. 5 of this permit.

13. The permittee must continue to use no elemental chlorine on any of the bleaching lines.

14. The permittee may use any EPA approved method based on 40 CFR Part 136 provided the MQL for the chosen method is equal to or less than what has been specified in chart below:

Pollutant	MQL (µg/l)
Total Recoverable Copper	0.5
Total Recoverable Mercury	0.005*
Total Recoverable Zinc	20

*For purposes of testing under the Mercury Minimization Plan.

The permittee may develop a matrix specific method detection limit (MDL) in accordance with Appendix B of 40 CFR Part 136. For any pollutant for which the permittee determines a site specific MDL, the permittee shall send to ADEQ, NPDES Permits Branch, a report containing QA/QC documentation, analytical results, and calculations necessary to demonstrate that a site specific MDL was correctly calculated. A site specific minimum quantification level (MQL) shall be determined in accordance with the following calculation:

$$\text{MQL} = 3.3 \times \text{MDL}$$

Upon written approval by Permits Branch, the site specific MQL may be utilized by the permittee for all future Discharge Monitoring Report (DMR) calculations and reporting requirements.

15. Stormwater runoff commingling with other process wastewater discharged from Outfall 001 shall be managed in accordance with the Best Management Practices (BMPs) in the form of a stormwater pollution prevention plan (SWPPP) to control the quality of stormwater discharges associated with industrial activity that are authorized by this permit. Use of BMPs in lieu of numeric effluent limitations in NPDES permits is authorized under 40 CFR 122.44(k) when the Permitting Authority finds numeric effluent limitations to be infeasible to carry out the purposes of the Clean Water Act.
16. The permittee has agreed to monitor the color of the Ouachita River above and below its confluence with Coffee Creek at the previously approved sampling points. An EPA approved test method will be used and the color will be measured on the platinum-cobalt scale.
17. The permittee must receive written permission prior to the transfer of any product stewardship waters from another Georgia-Pacific facility to the Crossett facility. The request must include, at a minimum, the following items: source of the wastewaters, confirmation that the wastewaters are similar to those already being treated in the system, the need for transferring the wastewater, the volume of wastewater involved, and the dates on which the transfer will occur.

The exceptions to 40 CFR Part 437, as listed in the preamble, must be met. Also, the transfers cannot cause non-compliance with the terms and conditions of the permit. The Department reserves the right to require additional monitoring based on the types of wastewater transferred.

18. Mercury Minimization Plan

- The permittee shall comply with the Mercury Minimization Plan (MMP) developed during the term of the previous permit and approved by the Department on November 16, 2011. Any proposed changes to the MMP must be approved by the Department prior to being implemented.
- The permittee shall submit an annual report to the Permits Branch by October 31 of each year during the term of the permit for the activities in the previous September 1 to August 31 time frame. The annual report must include a summary of potential significant sources of mercury, control measures developed and implemented, results of source reduction activities and monitoring, sampling results and any adjustments made to the program plan.

19. Reserved

20. The permittee may apply for exemption from the Chloroform monitoring requirements in 40 CFR 430.24 provided all portions of 40 CFR 430.02(f) are met. Any exemption from the monitoring requirements must take place through a major modification of this permit. This condition is applicable to the three internal outfalls.
21. The permittee may not use any chlorophenolic biocides without first obtaining a major permit modification under 40 CFR 122.62. The permittee submitted a certification with the renewal application stating that they do not use any chlorophenolic biocides at this facility.

22. WHOLE EFFLUENT TOXICITY TESTING (7-DAY CHRONIC NOEC FRESHWATER)

This condition applies to *P. promelas* for the term of the permit and to *C. dubia* for the first three years of the permit term.

A. SCOPE AND METHODOLOGY

- i. The permittee shall test the effluent for toxicity in accordance with the provisions in this section.

APPLICABLE TO FINAL OUTFALL:	001
REPORTED ON DMR AS FINAL OUTFALL:	001
CRITICAL DILUTION (%):	80%
EFFLUENT DILUTION SERIES (%):	25%, 34%, 45%, 60%, & 80%
TESTING FREQUENCY:	once/2 months
COMPOSITE SAMPLE TYPE:	Defined at PART I
TEST SPECIES/METHODS:	40 CFR Part 136

Ceriodaphnia dubia chronic static renewal survival and reproduction test, Method 1002.0, EPA-821-R-02-013, or the most recent update thereof. This test should be terminated when 60% of the surviving females in the control produce three broods or at the end of eight days, whichever comes first.

Pimephales promelas (Fathead minnow) chronic static renewal 7-day larval survival and growth test, Method 1000.0, EPA-821-R-02-013, or the most recent update thereof. A minimum of five (5) replicates with eight (8) organisms per replicate must be used in the control and in each effluent dilution of this test.

- ii. The NOEC (No Observed Effect Concentration) is herein defined as the greatest effluent dilution at and below which toxicity (lethal or sub-lethal) that is statistically different from the control (0% effluent) at the 95% confidence level does not occur. Chronic lethal test failure is defined as a demonstration of a statistically significant lethal effect at test completion to a test species at or below the critical dilution. Chronic sub-lethal test failure is defined as a demonstration of a statistically significant sub-lethal effect (i.e., growth or reproduction) at test completion to a test species at or below the critical dilution.

- iii. This permit may be reopened to require whole effluent toxicity limits, chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity.

B. PERSISTENT LETHAL and/or SUB-LETHAL EFFECTS

The requirements of this subsection apply only when a toxicity test demonstrates significant lethal and/or sub-lethal effects below the critical dilution. The purpose of retests is to determine the duration of a toxic event. A test that meets all test acceptability criteria and demonstrates significant toxic effects does not need additional confirmation. Such testing cannot confirm or disprove a previous test result.

If a frequency reduction, as specified in Item F, has been granted and any valid test demonstrates significant lethal or sub-lethal effects to a test species below the critical dilution, the frequency of testing for that species is automatically increased to once per quarter for the life of the permit. In addition:

i. Part I Testing Frequency Other Than Monthly

- a. The permittee shall conduct a total of three (3) retests for any species that demonstrates significant toxic effects at or below the critical dilution. The retests shall be conducted monthly during the next three consecutive months. If testing on a quarterly basis, the permittee may substitute one of the retests in lieu of one scheduled toxicity test. A full report shall be prepared for each test required by this section in accordance with procedures outlined in Item D of this section and submitted with the period discharge monitoring report (DMR) to the permitting authority for review.
- b. **IF LETHAL EFFECTS HAVE BEEN DEMONSTRATED** If any of the retests demonstrates significant lethal effects below the critical dilution, the permittee shall initiate Toxicity Reduction Evaluation (TRE) requirements as specified in Item E of this section. The permittee shall notify ADEQ in writing within 5 days of the failure of any retest, and the TRE initiation date will be the test completion date of the first failed retest. A TRE may also be required due to a demonstration of intermittent lethal effects below the critical dilution, or for failure to perform the required retests. A TRE required based on lethal effects should consider any sub-lethal effects as well.
- c. **IF SUB-LETHAL EFFECTS ONLY HAVE BEEN DEMONSTRATED** If any two of the three retests demonstrates significant sub-lethal effects at 75% effluent or lower, the permittee shall initiate the Sub-Lethal Toxicity Reduction Evaluation (TRE_{SL}) requirements as specified in Item E of this section. The permittee shall notify ADEQ in writing within 5 days of the failure of any retest, and the Sub-

Lethal Effects TRE initiation date will be the test completion date of the first failed retest. A TRE may be also be required for failure to perform the required retests.

- d. The provisions of Item B.i.a are suspended upon submittal of the TRE Action Plan.

C. REQUIRED TOXICITY TESTING CONDITIONS

i. Test Acceptance

The permittee shall repeat a test, including the control and all effluent dilutions, if the procedures and quality assurance requirements defined in the test methods or in this permit are not satisfied, including the following additional criteria:

- a. The toxicity test control (0% effluent) must have survival equal to or greater than 80%.
- b. The mean number of Ceriodaphnia dubia neonates produced per surviving female in the control (0% effluent) must be 15 or more.
- c. 60% of the surviving control females must produce three broods.
- d. The mean dry weight of surviving Fathead minnow larvae at the end of the 7 days in the control (0% effluent) must be 0.25 mg per larva or greater.
- e. The percent coefficient of variation between replicates shall be 40% or less in the control (0% effluent) for: the young of surviving females in the Ceriodaphnia dubia reproduction test; the growth and survival endpoints of the Fathead minnow test.
- f. The percent coefficient of variation between replicates shall be 40% or less in the critical dilution, unless significant lethal or sub-lethal effects are exhibited for: the young of surviving females in the Ceriodaphnia dubia reproduction test; the growth and survival endpoints of the Fathead minnow test.
- g. If a test passes, yet the percent coefficient of variation between replicates is greater than 40% in the control (0% effluent) and/or in the critical dilution for: the young of surviving females in the Ceriodaphnia dubia reproduction test; the growth and survival endpoints of the Fathead minnow test, the test is determined to be invalid. A repeat test shall be conducted within the required reporting period of any test determined to be invalid.
- h. If a test fails, test failure may not be construed or reported as invalid due to a coefficient of variation value of greater than 40%.

- i. A Percent Minimum Significant Difference (PMSD) range of 13 - 47 for Ceriodaphnia dubia reproduction;
 - j. A PMSD range of 12 - 30 for Fathead minnow growth.
- ii. Statistical Interpretation
- a. For the Ceriodaphnia dubia survival test, the statistical analyses used to determine if there is a significant difference between the control and the critical dilution shall be Fisher's Exact Test as described in EPA/821/R-02-013 or the most recent update thereof.
 - b. For the Ceriodaphnia dubia reproduction test and the Fathead minnow larval survival and growth test, the statistical analyses used to determine if there is a significant difference between the control and the critical dilution shall be in accordance with the methods for determining the No Observed Effect Concentration (NOEC) as described in EPA/821/R-02-013 or the most recent update thereof.
 - c. If the conditions of Test Acceptability are met in Item C.i above and the percent survival of the test organism is equal to or greater than 80% in the critical dilution concentration and all lower dilution concentrations, the test shall be considered to be a passing test, and the permittee shall report a survival NOEC of not less than the critical dilution for the DMR reporting requirements found in Item D below.
- iii. Dilution Water
- a. Dilution water used in the toxicity tests will be receiving water collected as close to the point of discharge as possible but unaffected by the discharge. The permittee shall substitute synthetic dilution water of similar pH, hardness, and alkalinity to the closest downstream perennial water for;
 - (1) toxicity tests conducted on effluent discharges to receiving water classified as intermittent streams; and
 - (2) toxicity tests conducted on effluent discharges where no receiving water is available due to zero flow conditions.
 - b. If the receiving water is unsatisfactory as a result of instream toxicity (fails to fulfill the test acceptance criteria of Item C.i), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:

- (1) a synthetic dilution water control which fulfills the test acceptance requirements of Item C.i was run concurrently with the receiving water control;
- (2) the test indicating receiving water toxicity has been carried out to completion (i.e., 7 days);
- (3) the permittee includes all test results indicating receiving water toxicity with the full report and information required by Item D below; and
- (4) the synthetic dilution water shall have a pH, hardness, and alkalinity similar to that of the receiving water or closest downstream perennial water not adversely affected by the discharge, provided the magnitude of these parameters will not cause toxicity in the synthetic dilution water.

iv. Samples and Composites

- a. The permittee shall collect a minimum of three flow-weighted composite samples from the outfall(s) listed at Item A.i above. Unless otherwise stated in this section, a composite sample for WET shall consist of a minimum of 12 subsamples gathered at equal time intervals during a 24-hour period.
- b. The permittee shall collect second and third composite samples for use during 24-hour renewals of each dilution concentration for each test. The permittee must collect the composite samples such that the effluent samples, on use, are representative of any periodic episode of chlorination, biocide usage or other potentially toxic substance discharged on a regular or intermittent basis.
- c. The permittee must collect all three flow-weighted composite samples within the monitoring period. Second and/or third composite samples shall not be collected into the next monitoring period; such tests will be determined to not meet either reporting period requirements. Monitoring period definitions are listed in Part IV.
- d. The permittee must collect the composite samples so that the maximum holding time for any effluent sample shall not exceed 72 hours. The permittee must have initiated the toxicity test within 36 hours after the collection of the last portion of the first composite sample. Samples shall be chilled to between 0 and 6 degrees Centigrade during collection, shipping, and/or storage.
- e. If the flow from the outfall(s) being tested ceases during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions and the sample holding time are waived during that sampling period. However, the permittee must have collected an effluent composite sample volume during the period of discharge that is sufficient

to complete the required toxicity tests with daily renewal of effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate days if the discharge occurs over multiple days. The effluent composite sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report required in Item D of this section.

- f. MULTIPLE OUTFALLS: If the provisions of this section are applicable to multiple outfalls, the permittee shall combine the composite effluent samples in proportion to the average flow from the outfalls listed in Item A.i. above for the day the sample was collected. The permittee shall perform the toxicity test on the flow-weighted composite of the outfall samples.
- g. If chlorination is part of the treatment process, the permittee shall not allow the sample to be dechlorinated at the laboratory. At the time of sample collection the permittee shall measure the TRC of the effluent. The measured concentration of TRC for each sample shall be included in the lab report submitted by the permittee.

D. REPORTING

- i. The permittee shall prepare a full report of the results of all tests conducted pursuant to this section in accordance with the Report Preparation Section of EPA/821/R-02-013, or the most current publication, for every valid or invalid toxicity test initiated whether carried to completion or not. The permittee shall retain each full report pursuant to the provisions of PART III.C.7 of this permit. The permittee shall submit full reports. For any test or retest which fails, is considered invalid or which is terminated early for any reason, the full report must be submitted for agency review.
- ii. A valid test for each species must be reported on the DMR during each reporting period specified in PART I of this permit. The full reports for all invalid tests, repeat tests (for invalid tests), and retests (for tests previously failed) performed during the reporting period must be attached to the DMR for Agency review.
- iii. The permittee shall submit the results of each valid toxicity test and retest on the subsequent monthly DMR for that reporting period in accordance with PART III.D.4 of this permit, as follows below. Only results of valid tests are to be reported on the DMR.
 - a. Pimephales promelas (Fathead minnow)

- (1) If the No Observed Effect Concentration (NOEC) for survival is less than the critical dilution, enter a '1'; otherwise, enter a '0' for Parameter No. TLP6C

- (2) Report the NOEC value for survival, Parameter No. TOP6C
- (3) Report the NOEC value for growth, Parameter No. TPP6C
- (4) If the NOEC for growth is less than the critical dilution, enter a '1'; otherwise, enter a '0' for Parameter No. TGP6C
- (5) Report the highest (critical dilution or control) Coefficient of Variation for growth, Parameter No. TQP6C
- (6) If conducting retests due to a test failure (demonstration of significant toxic effects at or below the critical dilution):
 - (A) Consecutive Monthly Retest 1: If the NOEC (lowest lethal or sub-lethal) for *P. promelas* is less than the critical dilution, enter a '1'; otherwise, enter a '0' under Parameter No. 22418;
 - (B) Consecutive Monthly Retest 2: If the NOEC (lowest lethal or sub-lethal) for *P. promelas* is less than the critical dilution, enter a '1'; otherwise, enter a '0' under Parameter No. 22419;
 - (C) Consecutive Monthly Retest 3: If the NOEC (lowest lethal or sub-lethal) for *P. promelas* is less than the critical dilution, enter a '1'; otherwise, enter a '0' under Parameter No. 51444;
 - (D) If testing on a quarterly basis, the permittee may substitute one of the retests in lieu of one scheduled toxicity test;
 - (E) If retests are not required, Report NODI=9 (Conditional Monitoring - Not Required This Period) under Parameter Nos. 22418, 22419, 51444

b. Ceriodaphnia dubia

- (1) If the NOEC for survival is less than the critical dilution, enter a '1'; otherwise, enter a '0' for Parameter No. TLP3B
- (2) Report the NOEC value for survival, Parameter No. TOP3B
- (3) Report the NOEC value for reproduction, Parameter No. TPP3B
- (4) If the NOEC for reproduction is less than the critical dilution, enter a '1'; otherwise, enter a '0' for Parameter No. TGP3B

- (5) Report the higher (critical dilution or control) Coefficient of Variation for reproduction, Parameter No. TQP3B
- (6) If conducting retests due to a test failure (demonstration of significant toxic effects at or below the critical dilution):
 - (A) Consecutive Monthly Retest 1: If the NOEC (lowest lethal or sub-lethal) for *C. dubia* is less than the critical dilution, enter a '1'; otherwise, enter a '0' under Parameter No. 22415;
 - (B) Consecutive Monthly Retest 2: If the NOEC (lowest lethal or sub-lethal) for *C. dubia* is less than the critical dilution, enter a '1'; otherwise, enter a '0' under Parameter No. 22416;
 - (C) Consecutive Monthly Retest 3: If the NOEC (lowest lethal or sub-lethal) for *C. dubia* is less than the critical dilution, enter a '1'; otherwise, enter a '0' under Parameter No. 51443;
 - (D) If testing on a quarterly basis, the permittee may substitute one of the retests in lieu of one scheduled toxicity test;
 - (E) If retests are not required, Report NODI=9 (Conditional Monitoring - Not Required This Period) under Parameter Nos. 22415, 22416, and 51443

E. TOXICITY REDUCTION EVALUATIONS (TREs)

TREs for lethal and sub-lethal effects are performed in a very similar manner. EPA Region 6 is currently addressing TREs as follows: a sub-lethal TRE (TRE_{SL}) is triggered based on three sub-lethal test failures while a lethal effects TRE (TRE_L) is triggered based on only two test failures for lethality. In addition, EPA Region 6 will consider the magnitude of toxicity and use flexibility when considering a TRE_{SL} where there are no effects at effluent dilutions of 75% or lower.

- i. Within ninety (90) days of confirming toxicity, as outlined above, the permittee shall submit a Toxicity Reduction Evaluation (TRE) Action Plan and Schedule for conducting a TRE. The TRE Action Plan shall specify the approach and methodology to be used in performing the TRE. A Toxicity Reduction Evaluation is an investigation intended to determine those actions necessary to achieve compliance with water quality-based effluent limits by reducing an effluent's toxicity to an acceptable level. A TRE is defined as a step-wise process which combines toxicity testing and analyses of the physical and chemical characteristics of a toxic effluent to identify the constituents causing effluent toxicity and/or treatment methods which will reduce the effluent toxicity. The goal of the TRE is to maximally reduce the toxic effects of

effluent at the critical dilution and includes the following:

- a. Specific Activities. The plan shall detail the specific approach the permittee intends to utilize in conducting the TRE. The approach may include toxicity characterizations, identifications and confirmation activities, source evaluation, treatability studies, or alternative approaches. When the permittee conducts Toxicity Characterization Procedures the permittee shall perform multiple characterizations and follow the procedures specified in the documents 'Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures' (EPA-600/6-91/003) and 'Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I' (EPA-600/6-91/005F), or alternate procedures. When the permittee conducts Toxicity Identification Evaluations and Confirmations, the permittee shall perform multiple identifications and follow the methods specified in the documents 'Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity' (EPA/600/R-92/080) and 'Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity' (EPA/600/R-92/081), as appropriate.

The documents referenced above may be obtained through the National Technical Information Service (NTIS) by phone at (703) 487-4650, or by writing:

U.S. Department of Commerce
National Technical Information Service
5285 Port Royal Road
Springfield, VA 22161

- b. Sampling Plan (e.g., locations, methods, holding times, chain of custody, preservation, etc.). The effluent sample volume collected for all tests shall be adequate to perform the toxicity test, toxicity characterization, identification and confirmation procedures, and conduct chemical specific analyses when a probable toxicant has been identified;
- c. Where the permittee has identified or suspects specific pollutant(s) and/or source(s) of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical specific analyses for the identified and/or suspected pollutant(s) and/or source(s) of effluent toxicity. Where lethality was demonstrated within 48 hours of test initiation, each composite sample shall be analyzed independently. Otherwise the permittee may substitute a composite sample, comprised of equal portions of the individual composite samples, for the chemical specific analysis;
- d. Quality Assurance Plan (e.g., QA/QC implementation, corrective actions, etc.); and

- e. Project Organization (e.g., project staff, project manager, consulting services, etc.).
- ii. The permittee shall initiate the TRE Action Plan within thirty (30) days of plan and schedule submittal. The permittee shall assume all risks for failure to achieve the required toxicity reduction.
- iii. The permittee shall submit a quarterly TRE Activities Report, with the Discharge Monitoring Report in the months of January, April, July and October, containing information on toxicity reduction evaluation activities including:
 - a. any data and/or substantiating documentation which identifies the pollutant(s) and/or source(s) of effluent toxicity;
 - b. any studies/evaluations and results on the treatability of the facility's effluent toxicity; and
 - c. any data which identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to meet no significant toxicity at the critical dilution.
- iv. The permittee shall submit a Final Report on Toxicity Reduction Evaluation Activities no later than twenty-eight (28) months from confirming toxicity in the retests, which provides information pertaining to the specific control mechanism selected that will, when implemented, result in reduction of effluent toxicity to no significant toxicity at the critical dilution. The report will also provide a specific corrective action schedule for implementing the selected control mechanism.
- v. Quarterly testing during the TRE is a minimum monitoring requirement. EPA recommends that permittees required to perform a TRE not rely on quarterly testing alone to ensure success in the TRE, and that additional screening tests be performed to capture toxic samples for identification of toxicants. Failure to identify the specific chemical compound causing toxicity test failure will normally result in a permit limit for whole effluent toxicity limits per federal regulations at 40 CFR 122.44(d)(1)(v).

F. MONITORING FREQUENCY REDUCTION

This condition does not apply to *C. dubia*.

- i. The permittee may apply for a testing frequency reduction upon the successful completion of the first four consecutive quarters or first twelve consecutive months (in accordance with Item A.i.) of the current permit term of testing for one or both test species, with no lethal or sub-lethal effects demonstrated below the critical dilution. If granted, the monitoring frequency for Fathead minnow may be reduced to not less than

- twice per year .
- ii. **CERTIFICATION** - The permittee must certify in writing that no test failures have occurred and that all tests meet all test acceptability criteria in Item C.i. above. In addition the permittee must provide a list with each test performed including test initiation date, species, NOECs for lethal and sub-lethal effects and the maximum coefficient of variation for the controls. Upon review and acceptance of this information the agency will issue a letter of confirmation of the monitoring frequency reduction. A copy of the letter will be forwarded to the agency's Permit Compliance System section to update the permit reporting requirements.
 - iii. **SUB-LETHAL OR SURVIVAL FAILURES** - Monthly retesting is not required if the permittee is performing a TRE.
 - iv. Any monitoring frequency reduction granted applies only until the expiration date of this permit, at which time the monitoring frequency for Fathead minnow reverts to once per quarter until the permit is re-issued.
23. Solids are placed in the facility's north landfill (Permit No. 292-S3N) as necessary or in the facility's reclamation area. Utilization of the reclamation area(s) shall be in accordance with approved reclamation/closure plans and schedules approved in coordination with the Department's Office of Land Resources, Regulated Waste Division.
24. For Internal Outfalls 101, 102 and 103, the reported flow may be calculated based on a summation of measured flow rates and flows from material balances. Within 60 days of the effective date of this permit, the methodology of the calculation used for each of these internal outfalls must be submitted to the ADEQ for approval. In the event of changes in equipment or the process that may modify this methodology, the proposed changes must be submitted to the ADEQ for approval at least 30 days prior to making such a change.

25. WHOLE EFFLUENT TOXICITY LIMITS (7-DAY CHRONIC NOEC FRESHWATER)

This condition applies only to *C. dubia* beginning three years from the effective date of the permit.

A. SCOPE AND METHODOLOGY

- i. The permittee shall test the effluent for toxicity in accordance with the provisions in this section.

APPLICABLE TO FINAL OUTFALL:	001
REPORTED ON DMR AS FINAL OUTFALL:	001
CRITICAL DILUTION (%):	80%
EFFLUENT DILUTION SERIES (%):	25%, 34%, 45%, 60%, & 80%
CHRONIC LIMIT:	not < 80%
SCHEDULE OF COMPLIANCE:	YES
TESTING FREQUENCY:	once/2 months
COMPOSITE SAMPLE TYPE:	Defined at PART I
TEST SPECIES/METHODS:	40 CFR Part 136

Ceriodaphnia dubia chronic static renewal survival and reproduction test, Method 1002.0, EPA-821-R-02-013, or the most recent update thereof. This test should be terminated when 60% of the surviving females in the control produce three broods or at the end of eight days, whichever comes first.

- ii. The NOEC (No Observed Effect Concentration) is herein defined as the greatest effluent dilution at and below which toxicity (lethal or sub-lethal) that is statistically different from the control (0% effluent) at the 95% confidence level does not occur. Chronic lethal test failure is defined as a demonstration of a statistically significant lethal effect at test completion to a test species at or below the critical dilution. Chronic sub-lethal test failure is defined as a demonstration of a statistically significant sub-lethal effect (i.e., reproduction) at test completion to a test species at or below the critical dilution.

- iii. The conditions of this item are effective beginning with the effective date of the WET limit. When the effluent fails the chronic endpoint below the required limit specified in Item A.i., the permittee shall be considered in violation of this permit limit and the frequency for the affected species will increase to monthly until such time compliance with the No Observed Effect Concentration (NOEC) effluent limitation is demonstrated for a period of three consecutive months, at which time the permittee may return to the testing frequency stated in PART I of this permit. The purpose of the increased frequency WET testing is to determine the duration of a toxic event. A test that meets all test acceptability criteria and demonstrates significant toxic effects does not need additional confirmation. Such testing cannot confirm or disprove a previous test result.
- iv. If under a TRE, the permittee may conduct quarterly testing as a minimum monitoring requirement for the organism(s) under investigation for the duration of the TRE. Upon completion of the TRE, monitoring will revert back to the conditions specified in Item A.iii.
- v. This permit may be reopened to require chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity.

B. REQUIRED TOXICITY TESTING CONDITIONS

i. Test Acceptance

The permittee shall repeat a test, including the control and all effluent dilutions, if the procedures and quality assurance requirements defined in the test methods or in this permit are not satisfied, including the following additional criteria:

- a. The toxicity test control (0% effluent) must have survival equal to or greater than 80%.
- b. The mean number of Ceriodaphnia dubia neonates produced per surviving female in the control (0% effluent) must be 15 or more.
- c. 60% of the surviving control females must produce three broods.
- d. Reserved.
- e. The percent coefficient of variation between replicates shall be 40% or less in the control (0% effluent) for the young of surviving females in the Ceriodaphnia dubia reproduction test.

- f. The percent coefficient of variation between replicates shall be 40% or less in the critical dilution, unless significant lethal or sub-lethal effects are exhibited for: the young of surviving females in the Ceriodaphnia dubia reproduction test.
- g. If a test passes, yet the percent coefficient of variation between replicates is greater than 40% in the control (0% effluent) and/or in the critical dilution for: the young of surviving females in the Ceriodaphnia dubia reproduction test, the test is determined to be invalid. A repeat test shall be conducted within the required reporting period of any test determined to be invalid.
- h. If a test fails, test failure may not be construed or reported as invalid due to a coefficient of variation value of greater than 40%.
- i. A Percent Minimum Significant Difference (PMSD) range of 13 - 47 for Ceriodaphnia dubia reproduction.
- ii. Statistical Interpretation
 - a. For the Ceriodaphnia dubia survival test, the statistical analyses used to determine if there is a significant difference between the control and the critical dilution shall be Fisher's Exact Test as described in EPA-821-R-02-013 or the most recent update thereof.
 - b. For the Ceriodaphnia dubia reproduction test the statistical analyses used to determine if there is a significant difference between the control and the critical dilution shall be in accordance with the methods for determining the No Observed Effect Concentration (NOEC) as described in EPA-821-R-02-013, or the most recent update thereof.
 - c. If the conditions of Test Acceptability are met in Item B.i above and the percent survival of the test organism is equal to or greater than 80% in the critical dilution concentration and all lower dilution concentrations, the test shall be considered to be a passing test, and the permittee shall report a survival NOEC of not less than the critical dilution for the DMR reporting requirements found in Item C below.
- iii. Dilution Water
 - a. Dilution water used in the toxicity tests will be receiving water collected as close to the point of discharge as possible but unaffected by the discharge. The permittee shall substitute synthetic dilution water of similar pH, hardness, and alkalinity to the closest downstream perennial water where the receiving stream is classified as intermittent or where the receiving stream has no flow due to zero flow conditions.

- b. If the receiving water is unsatisfactory as a result of instream toxicity (fails to fulfill the test acceptance criteria of Item B.i), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:
 - (1) a synthetic dilution water control which fulfills the test acceptance requirements of Item B.i was run concurrently with the receiving water control;
 - (2) the test indicating receiving water toxicity has been carried out to completion (i.e., 7 days);
 - (3) the permittee includes all test results indicating receiving water toxicity with the full report and information required by Item C.i below; and
 - (4) the synthetic dilution water shall have a pH, hardness, and alkalinity similar to that of the receiving water or closest downstream perennial water not adversely affected by the discharge, provided the magnitude of these parameters will not cause toxicity in the synthetic dilution water.

iv. Samples and Composites

- a. The permittee shall collect a minimum of three flow-weighted composite samples from the outfall(s) listed at Item A.i above. Unless otherwise stated in this section, a composite sample for WET shall consist of a minimum of 12 subsamples gathered at equal time intervals during a 24-hour period.
- b. The permittee must collect all three flow-weighted composite samples within the monitoring period. The permittee shall collect second and third composite samples for use during 24-hour renewals of each dilution concentration for each test. The permittee must collect the composite samples such that the effluent samples are representative of any periodic episode of chlorination, biocide usage or other potentially toxic substance discharged on a regular or intermittent basis.
- c. The permittee must collect all three flow-weighted composite samples within the monitoring period. Second and/or third composite samples shall not be collected into the next monitoring period; such tests will be determined to not meet either reporting period requirements. Monitoring period definitions are listed in Part IV.
- d. The permittee must collect the composite samples so that the maximum holding time for any effluent sample shall not exceed 72 hours. The permittee must have initiated the toxicity test within 36 hours after the collection of the last portion of the first composite sample. Samples shall be chilled to between 0 and 6 degrees Centigrade during collection, shipping, and/or storage.

- e. If the flow from the outfall(s) being tested ceases during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions and the sample holding time are waived during that sampling period. However, the permittee must have collected an effluent composite sample volume during the period of discharge that is sufficient to complete the required toxicity tests with daily renewal of effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate days if the discharge occurs over multiple days. The effluent composite sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report required in Item C of this section
- f. MULTIPLE OUTFALLS: If the provisions of this section are applicable to multiple outfalls, the permittee shall combine the composite effluent samples in proportion to the average flow from the outfalls listed in Item A.i above for the day the sample was collected. The permittee shall perform the toxicity test on the flow-weighted composite of the outfall samples.
- g. If chlorination is part of the treatment process, the permittee shall not allow the sample to be dechlorinated at the laboratory. At the time of sample collection the permittee shall measure the TRC of the effluent. The measured concentration of TRC for each sample shall be included in the lab report submitted by the permittee.

C. REPORTING

- i. The permittee shall prepare a full report of the results of all tests conducted pursuant to this section in accordance with the Report Preparation Section of EPA-821-R-02-013, or the most current publication, for every valid or invalid toxicity test initiated whether carried to completion or not. The permittee shall retain each full report pursuant to the provisions of PART III.C.7 of this permit. The permittee shall submit full reports. For any test which fails, is considered invalid or which is terminated early for any reason, the full report must be submitted for agency review.
- ii. The permittee shall report the Whole Effluent Toxicity NOEC under Parameter No. 51710 for *C. dubia*, on the Scheduled DMR for that reporting period in accordance with PART III.D.4 of this permit.

A valid test for *C. dubia* must be reported on the Scheduled DMR during each reporting period specified in PART I of this permit. The full reports for all invalid tests and repeat tests (for invalid tests) performed during the reporting period must be attached to the DMR for Agency review.

iii. The permittee shall submit the results of the valid toxicity test on the Scheduled DMR for that reporting period in accordance with PART III.D.4 of this permit, as follows below. The permittee shall submit the results of the valid monthly increased frequency toxicity tests on the Unscheduled DMRs. If testing on once per two months basis, the permittee may substitute one of the monthly increased frequency toxicity tests in lieu of one Scheduled toxicity test on the Scheduled DMR. Only results of valid tests are to be reported on a DMR.

a. reserved

b. Ceriodaphnia dubia

- (1) If the NOEC for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TLP3B
- (2) Report the NOEC value for survival, Parameter No. TOP3B
- (3) Report the NOEC value for reproduction, Parameter No. TPP3B
- (4) If the NOEC for reproduction is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TGP3B
- (5) Report the higher (critical dilution or control) Coefficient of Variation for reproduction, Parameter No. TQP3B
- (6) Report the lowest NOEC value for survival or reproduction, Limit Parameter No. 51710.
- (7) The permittee shall submit the results of the monthly increased frequency toxicity tests on the Unscheduled DMRs.

D. TOXICITY REDUCTION EVALUATIONS (TREs)

TREs for lethal and sub-lethal effects are performed in a very similar manner. EPA Region 6 is currently addressing TREs as follows: a sub-lethal TRE (TRE_{SL}) is triggered based on three sub-lethal test failures while a lethal effects TRE (TRE_L) is triggered based on only two test failures for lethality. In addition, EPA Region 6 will consider the magnitude of toxicity and use flexibility when considering a TRE_{SL} where there are no effects at effluent dilutions of 75% or lower.

- i. Within ninety (90) days of confirming toxicity, as outlined above, the permittee shall submit a Toxicity Reduction Evaluation (TRE) Action Plan and Schedule for conducting a TRE. The TRE Action Plan shall specify the approach and methodology

to be used in performing the TRE. A Toxicity Reduction Evaluation is an investigation intended to determine those actions necessary to achieve compliance with water quality-based effluent limits by reducing an effluent's toxicity to an acceptable level. A TRE is defined as a step-wise process which combines toxicity testing and analyses of the physical and chemical characteristics of a toxic effluent to identify the constituents causing effluent toxicity and/or treatment methods which will reduce the effluent toxicity. The goal of the TRE is to maximally reduce the toxic effects of effluent at the critical dilution and includes the following:

- a. Specific Activities. The plan shall detail the specific approach the permittee intends to utilize in conducting the TRE. The approach may include toxicity characterizations, identifications and confirmation activities, source evaluation, treatability studies, or alternative approaches. When the permittee conducts Toxicity Characterization Procedures the permittee shall perform multiple characterizations and follow the procedures specified in the documents 'Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures' (EPA-600/6-91/003) and 'Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I' (EPA-600/6-91/005F), or alternate procedures. When the permittee conducts Toxicity Identification Evaluations and Confirmations, the permittee shall perform multiple identifications and follow the methods specified in the documents 'Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity' (EPA/600/R-92/080) and 'Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity' (EPA/600/R-92/081), as appropriate.

The documents referenced above may be obtained through the National Technical Information Service (NTIS) by phone at (703) 487-4650, or by writing:

U.S. Department of Commerce
National Technical Information Service
5285 Port Royal Road
Springfield, VA 22161

- b. Sampling Plan (e.g., locations, methods, holding times, chain of custody, preservation, etc.). The effluent sample volume collected for all tests shall be adequate to perform the toxicity test, toxicity characterization, identification and confirmation procedures, and conduct chemical specific analyses when a probable toxicant has been identified;
- c. Where the permittee has identified or suspects specific pollutant(s) and/or source(s) of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing,

chemical specific analyses for the identified and/or suspected pollutant(s) and/or source(s) of effluent toxicity. Where lethality was demonstrated within 48 hours of test initiation, each composite sample shall be analyzed independently. Otherwise the permittee may substitute a composite sample, comprised of equal portions of the individual composite samples, for the chemical specific analysis;

- d. Quality Assurance Plan (e.g., QA/QC implementation, corrective actions, etc.); and
- e. Project Organization (e.g., project staff, project manager, consulting services, etc.).
- ii. The permittee shall initiate the TRE Action Plan within thirty (30) days of plan and schedule submittal. The permittee shall assume all risks for failure to achieve the required toxicity reduction.
- iii. The permittee shall submit a quarterly TRE Activities Report, with the Discharge Monitoring Report in the months of January, April, July and October, containing information on toxicity reduction evaluation activities including:
 - a. any data and/or substantiating documentation which identifies the pollutant(s) and/or source(s) of effluent toxicity;
 - b. any studies/evaluations and results on the treatability of the facility's effluent toxicity; and
 - c. any data which identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to meet no significant toxicity at the critical dilution.
- iv. The permittee shall submit a Final Report on Toxicity Reduction Evaluation Activities no later than twenty-eight (28) months from confirming toxicity in the monthly increased frequency tests, which provides information pertaining to the specific control mechanism selected that will, when implemented, result in reduction of effluent toxicity to no significant toxicity at the critical dilution. The report will also provide a specific corrective action schedule for implementing the selected control mechanism.
- v. Quarterly testing during the TRE is a minimum monitoring requirement. EPA recommends that permittees required to perform a TRE not rely on quarterly testing alone to ensure success in the TRE, and that additional screening tests be performed to capture toxic samples for identification of toxicants. Failure to identify the specific chemical compound causing toxicity test failure will normally result in a permit limit for whole effluent toxicity limits per federal regulations at 40 CFR 122.44(d)(1)(v).

E. TOXICITY RE-OPENER

- i. If the TRE has identified the source of toxicity and led to the successful elimination of effluent toxicity at the critical dilution, the WET final effluent limits may be replaced by monitoring and reporting only requirement thru a major permit modification. Otherwise, the permittee must comply with the final WET effluent limits.
- ii. If the TRE has not led to the successful elimination of effluent toxicity at the critical dilution, but has identified a causal parameter, the WET final effluent limit may be replaced by monitoring and reporting only requirement thru a major permit modification, with the addition of a limit for the causal parameter.

(Note: A modified permit must be effective prior to the effective date of the WET limits.)

PART III STANDARD CONDITIONS

SECTION A – GENERAL CONDITIONS

1. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Water Act and the Arkansas Water and Air Pollution Control Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; and/or for denial of a permit renewal application. **Any values reported in the required Discharge Monitoring Report (DMR) which are in excess of an effluent limitation specified in Part I shall constitute evidence of violation of such effluent limitation and of this permit.**

2. Penalties for Violations of Permit Conditions

The Arkansas Water and Air Pollution Control Act provides that any person who violates any provisions of a permit issued under the Act shall be guilty of a misdemeanor and upon conviction thereof shall be subject to imprisonment for not more than one (1) year, or a fine of not more than twenty-five thousand dollars (\$25,000) or by both such fine and imprisonment for each day of such violation. Any person who violates any provision of a permit issued under the Act may also be subject to civil penalty in such amount as the court shall find appropriate, not to exceed ten thousand dollars (\$10,000) for each day of such violation. The fact that any such violation may constitute a misdemeanor shall not be a bar to the maintenance of such civil action.

3. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause including, but not limited to the following:

- A. Violation of any terms or conditions of this permit.
- B. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts.
- C. A change in any conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- D. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination.
- E. Failure of the permittee to comply with the provisions of APCEC Regulation No. 9 (Permit fees) as required by Part III.A.11 herein.

The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

4. Toxic Pollutants

Notwithstanding Part III.A.3, if any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under APCEC Regulation No. 2, as amended, or Section 307(a) of the Clean Water Act for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitations on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standards or prohibition and the permittee so notified.

The permittee shall comply with effluent standards, narrative criteria, or prohibitions established under APCEC Regulation No. 2, as amended, or Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

5. Civil and Criminal Liability

Except as provided in permit conditions for “Bypass of Treatment Facilities” (Part III.B.4), and “Upset” (Part III.B.5), nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Any false or materially misleading representation or concealment of information required to be reported by the provisions of this permit or applicable state and federal statutes or regulations which defeats the regulatory purposes of the permit may subject the permittee to criminal enforcement pursuant to the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 et seq.).

6. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under Section 311 of the Clean Water Act.

7. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Clean Water Act.

8. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State, or local laws or regulations.

9. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provisions of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

10. Applicable Federal, State or Local Requirements

Permittees are responsible for compliance with all applicable terms and conditions of this permit. Receipt of this permit does not relieve any operator of the responsibility to comply with any other applicable federal requirements such as endangered species, state or local statute, ordinance or regulation.

11. Permit Fees

The permittee shall comply with all applicable permit fee requirements (i.e., including annual permit fees following the initial permit fee that will be invoiced every year the permit is active) for wastewater discharge permits as described in APCEC Regulation No. 9 (Regulation for the Fee System for Environmental Permits). Failure to promptly remit all required fees shall be grounds for the Director to initiate action to terminate this permit under the provisions of 40 CFR Parts 122.64 and 124.5(d), as adopted in APCEC Regulation No. 6 and the provisions of APCEC Regulation No. 8.

SECTION B – OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

- A. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

- B. The permittee shall provide an adequate operating staff which is duly qualified to carryout operation, maintenance, and testing functions required to insure compliance with the conditions of this permit.

2. Need to Halt or Reduce not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. Upon reduction, loss, or failure of the treatment facility, the permittee shall, to the extent necessary to maintain compliance with its permit, control production or discharges or both until the facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power for the treatment facility is reduced, is lost, or alternate power supply fails.

3. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment or the water receiving the discharge.

4. Bypass of Treatment Facilities

A. Bypass not exceeding limitation

The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts III.B.4.B and 4.C.

B. Notice

1. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
2. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part III.D.6 (24-hour notice).

C. Prohibition of bypass

1. Bypass is prohibited and the Director may take enforcement action against a permittee for bypass, unless:
 - (a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage.

- (b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if the permittee could have installed adequate backup equipment to prevent a bypass which occurred during normal or preventive maintenance.
 - (c) The permittee submitted notices as required by Part III.B.4.B.
- 2. The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in Part III.B.4.C(1).

5. Upset Conditions

- A. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Part III.B.5.B of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- B. Conditions necessary for demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - 1. An upset occurred and that the permittee can identify the specific cause(s) of the upset.
 - 2. The permitted facility was at the time being properly operated.
 - 3. The permittee submitted notice of the upset as required by Part III.D.6.
 - 4. The permittee complied with any remedial measures required by Part III.B.3.
- C. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

6. Removed Substances

- A. Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the State. The Permittee must comply with all applicable state and Federal regulations governing the disposal of sludge, including but not limited to 40 CFR Part 503, 40 CFR Part 257, and 40 CFR Part 258.

- B. Any changes to the permittee's disposal practices described in Part II of the permit will require at least 180 days prior notice to the Director to allow time for additional permitting. Please note that the 180 day notification requirement may be waived if additional permitting is not required for the change.

7. Power Failure

The permittee is responsible for maintaining adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failure either by means of alternate power sources, standby generators, or retention of inadequately treated effluent.

SECTION C – MONITORING AND RECORDS

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge during the entire monitoring period. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points shall not be changed without notification to and the approval of the Director. Intermittent discharge shall be monitored.

2. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to insure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to insure the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than +/- 10% from true discharge rates throughout the range of expected discharge volumes and shall be installed at the monitoring point of the discharge.

Calculated Flow Measurement

For calculated flow measurements that are performed in accordance with either the permit requirements or a Department approved method (i.e., as allowed under Part II.3), the +/- 10% accuracy requirement described above is waived. This waiver is only applicable when the method used for calculation of the flow has been reviewed and approved by the Department.

3. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals frequent enough to insure accuracy of measurements and shall insure that both calibration and maintenance activities will be conducted. An adequate analytical quality control program, including the analysis of sufficient standards, spikes, and duplicate samples to insure the accuracy of all required analytical results shall be maintained by the permittee or designated commercial laboratory. At a minimum, spikes and duplicate samples are to be analyzed on 10% of the samples.

4. Penalties for Tampering

The Arkansas Water and Air Pollution Control Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under the Act shall be guilty of a misdemeanor and upon conviction thereof shall be subject to imprisonment for not more than one (1) year or a fine of not more than ten thousand dollars (\$10,000) or by both such fine and imprisonment.

5. Reporting of Monitoring Results

Monitoring results must be reported on a Discharge Monitoring Report (DMR) form provided by the Department or other form/method approved in writing by the Department (e.g., electronic submittal of DMR once approved). Monitoring results obtained during the previous monitoring period shall be summarized and reported on a DMR form postmarked no later than the 25th day of the month or submitted electronically by 6:00 p.m. of the 25th, following the completed reporting period beginning on the effective date of the permit. When mailing the DMRs, duplicate copies of the forms signed and certified as required by Part III.D.11 and all other reports required by Part III.D, shall be submitted to the Director at the following address:

Enforcement Branch
Office of Water Quality
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118-5317

If permittee uses outside laboratory facilities for sampling and/or analysis, the name and address of the contract laboratory shall be included on the DMR.

6. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR. Such increased frequency shall also be indicated on the DMR.

7. Retention of Records

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of the Director at any time.

8. Record Contents

Records and monitoring information shall include:

- A. The date, exact place, time and methods of sampling or measurements, and preservatives used, if any.
- B. The individual(s) who performed the sampling or measurements.
- C. The date(s) and time analyses were performed.
- D. The individual(s) who performed the analyses.
- E. The analytical techniques or methods used.
- F. The measurements and results of such analyses.

9. Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- A. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit.
- B. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit.
- C. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit.
- D. Sample, inspect, or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

SECTION D – REPORTING REQUIREMENTS

1. Planned Changes

The Permittee shall give notice to the Director as soon as possible but no later than 180 days prior to any planned physical alterations or additions to the permitted facility [40 CFR 122.41(l)]. Notice is required only when:

- A. The alteration or addition to a permitted facility may meet one of the criteria for new sources at 40 CFR 122.29(b).
- B. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants subject to effluent limitations in the permit, or to the notification requirements under 40 CFR 122.42(b).

2. Anticipated Noncompliance

The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. Transfers

The permit is nontransferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Act.

4. Monitoring Reports

Monitoring results shall be reported at the intervals and in the form specified in Part III.C.5. **Discharge Monitoring Reports must be submitted even when no discharge occurs during the reporting period.**

5. Compliance Schedule

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date. Any reports of noncompliance shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

6. Twenty-four Hour Report

- A. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain the following information:
1. A description of the noncompliance and its cause.
 2. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue. and
 3. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
- B. The following shall be included as information which must be reported within 24 hours:
1. Any unanticipated bypass which exceeds any effluent limitation in the permit.
 2. Any upset which exceeds any effluent limitation in the permit.
 3. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in Part I of the permit to be reported within 24 hours to the Enforcement Section of the Office of Water Quality of the ADEQ.
- C. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours to the Enforcement Section of the Office of Water Quality of the ADEQ.

7. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Parts III.D.4, 5, and 6, at the time monitoring reports are submitted. The reports shall contain the information listed at Part III.D.6.

8. Changes in Discharge of Toxic Substances for Industrial Dischargers

The permittee shall notify the Director as soon as he/she knows or has reason to believe:

- A. That any activity has occurred or will occur which would result in the discharge on a routine or frequent basis of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the "notification levels" described in 40 CFR Part 122.42(a)(1).
- B. That any activity has occurred or will occur which would result in any discharge on a non-routine or infrequent basis of a toxic pollutant which is not limited in the permit, if that

discharge will exceed the highest of the “notification levels” described in 40 CFR Part 122.42(a)(2).

9. Duty to Provide Information

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit. Information shall be submitted in the form, manner and time frame requested by the Director.

10. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The complete application shall be submitted at least 180 days before the expiration date of this permit. The Director may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date. Continuation of expiring permits shall be governed by regulations promulgated in APCEC Regulation No. 6.

11. Signatory Requirements

All applications, reports, or information submitted to the Director shall be signed and certified as follows:

A. All **permit applications** shall be signed as follows:

1. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
 - (a) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation.
 - (b) The manager of one or more manufacturing, production, or operation facilities, provided: the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign

documents has been assigned or delegated to the manager in accordance with corporate procedures.

2. For a partnership or sole proprietorship: by a general partner or proprietor, respectively.
 3. For a municipality, State, Federal, or other public agency, by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
 - (a) The chief executive officer of the agency.
 - (b) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
- B. All **reports** required by the permit and **other information** requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
1. The authorization is made in writing by a person described above.
 2. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position).
 3. The written authorization is submitted to the Director.
- C. Certification. Any person signing a document under this section shall make the following certification:
- “I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

12. Availability of Reports

Except for data determined to be confidential under 40 CFR Part 2 and APCEC Regulation No. 6, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department of Environmental Quality. As required by

the Regulations, the name and address of any permit applicant or permittee, permit applications, permits, and effluent data shall not be considered confidential.

13. Penalties for Falsification of Reports

The Arkansas Air and Water Pollution Control Act provides that any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under this permit shall be subject to civil penalties specified in Part III.A.2 and/or criminal penalties under the authority of the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 et seq.).

PART IV DEFINITIONS

All definitions contained in Section 502 of the Clean Water Act and 40 CFR 122.2 shall apply to this permit and are incorporated herein by reference. Additional definitions of words or phrases used in this permit are as follows:

1. **“Act”** means the Clean Water Act, Public Law 95-217 (33.U.S.C. 1251 et seq.) as amended.
2. **“Administrator”** means the Administrator of the U.S. Environmental Protection Agency.
3. **“APCEC”** means the Arkansas Pollution Control and Ecology Commission.
4. **“Applicable effluent standards and limitations”** means all State and Federal effluent standards and limitations to which a discharge is subject under the Act, including, but not limited to, effluent limitations, standards of performance, toxic effluent standards and prohibitions, and pretreatment standards.
5. **“Applicable water quality standards”** means all water quality standards to which a discharge is subject under the federal Clean Water Act and which has been (a) approved or permitted to remain in effect by the Administrator following submission to the Administrator pursuant to Section 303(a) of the Act, or (b) promulgated by the Director pursuant to Section 303(b) or 303(c) of the Act, and standards promulgated under (APCEC) Regulation No. 2, as amended.
6. **“Best Management Practices (BMPs)”** are activities, practices, maintenance procedures, and other management practices designed to prevent or reduce the pollution of waters of the State. BMPs also include treatment technologies, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw sewage. BMPs may include structural devices or nonstructural practices.
7. **“Bypass”** means the intentional diversion of waste streams from any portion of a treatment facility, as defined at 40 CFR 122.41(m)(1)(i).
8. **“Composite sample”** is a mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing a minimum of 4 effluent portions collected at equal time intervals (but not closer than one hour apart) during operational hours, within the 24-hour period, and combined proportional to flow or a sample collected at more frequent intervals proportional to flow over the 24-hour period.
9. **“Daily Discharge”** means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling.
 - A. **Mass Calculations:** For pollutants with limitations expressed in terms of mass, the “daily discharge” is calculated as the total mass of pollutant discharged over the sampling day.
 - B. **Concentration Calculations:** For pollutants with limitations expressed in other units of measurement, the “daily discharge” is calculated as the average measurement of the pollutant over the day.
10. **“Daily Maximum”** discharge limitation means the highest allowable “daily discharge” during the calendar month. The 7-day average for Fecal Coliform Bacteria (FCB) or E-Coli is the geometric mean of the values of all effluent samples collected during the calendar week in colonies per 100 ml.
11. **“Department”** means the Arkansas Department of Environmental Quality (ADEQ).

12. **“Director”** means the Director of the Arkansas Department of Environmental Quality.
13. **“Dissolved oxygen limit”** shall be defined as follows:
 - A. When limited in the permit as a minimum monthly average, shall mean the lowest acceptable monthly average value, determined by averaging all samples taken during the calendar month.
 - B. When limited in the permit as an instantaneous minimum value, shall mean that no value measured during the reporting period may fall below the stated value.
14. **“E-Coli”** a sample consists of one effluent grab portion collected during a 24-hour period at peak loads. For E-Coli, report the monthly average as a 30-day geometric mean in colonies per 100 ml.
15. **“Fecal Coliform Bacteria (FCB)”** a sample consists of one effluent grab portion collected during a 24-hour period at peak loads. For Fecal Coliform Bacteria (FCB) report the monthly average as a 30-day geometric mean in colonies per 100 ml.
16. **“Grab sample”** means an individual sample collected in less than 15 minutes in conjunction with an instantaneous flow measurement.
17. **“Industrial User”** means a nondomestic discharger, as identified in 40 CFR Part 403, introducing pollutants to a POTW.
18. **“Instantaneous flow measurement”** means the flow measured during the minimum time required for the flow-measuring device or method to produce a result in that instance. To the extent practical, instantaneous flow measurements coincide with the collection of any grab samples required for the same sampling period so that together the samples and flow are representative of the discharge during that sampling period.
19. **“Instantaneous Maximum”** when limited in the permit as an instantaneous maximum value, shall mean that no value measured during the reporting period may fall above the stated value.
20. **“Instantaneous Minimum”** an instantaneous minimum value, shall mean that no value measured during the reporting period may fall below the stated value.
21. **“Monthly average”** means the highest allowable average of “daily discharges” over a calendar month, calculated as the sum of all “daily discharges” measured during a calendar month divided by the number of “daily discharges” measured during that month. For Fecal Coliform Bacteria (FCB) or E-Coli, report the monthly average.
22. **“Monitoring and Reporting”**

When a permit becomes effective, monitoring requirements are of the immediate period of the permit effective date. Where the monitoring requirement for an effluent characteristic is monthly or more frequently, the Discharge Monitoring Report (DMR) shall be submitted by the 25th of the month following the sampling. Where the monitoring requirement for an effluent characteristic is Quarterly, Semi-Annual, Annual, or Yearly, the DMR shall be submitted by the 25th of the month following the monitoring period end date.

 - A. **MONTHLY:**

is defined as a calendar month or any portion of a calendar month for monitoring requirement frequency of once/month or more frequently.
 - B. **BI-MONTHLY:**

is defined as two (2) calendar months or any portion of 2 calendar months for monitoring requirement frequency of once/2 months or more frequently.

C. QUARTERLY:

1. is defined as a **fixed calendar quarter** or any part of the fixed calendar quarter for a non-seasonal effluent characteristic with a measurement frequency of once/quarter. Fixed calendar quarters are: January through March, April through June, July through September, and October through December.
2. is defined as a **fixed three month period** (or any part of the fixed three month period) of or dependent upon the seasons specified in the permit for a seasonal effluent characteristic with a monitoring requirement frequency of once/quarter that does not coincide with the fixed calendar quarter. Seasonal calendar quarters are: May through July, August through October, November through January, and February through April.

D. SEMI-ANNUAL:

is defined as the fixed time periods January through June, and July through December (or any portion thereof) for an effluent characteristic with a measurement frequency of once/6 months or twice/year.

E. ANNUAL or YEARLY:

is defined as a fixed calendar year or any portion of the fixed calendar year for an effluent characteristic or parameter with a measurement frequency of once/year. A calendar year is January through December, or any portion thereof.

23. **“National Pollutant Discharge Elimination System”** means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements under Sections 307, 402, 318, and 405 of the Clean Water Act.
24. **“POTW”** means a Publicly Owned Treatment Works.
25. **“Reduction of CBOD₅/BOD₅ and TSS in mg/l Formula”**
$$((\text{Influent} - \text{Effluent}) / \text{Influent}) \times 100$$
26. **“Severe property damage”** means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in products.
27. **“Sewage sludge”** means the solids, residues, and precipitate separated from or created in sewage by the unit processes at a POTW. Sewage as used in this definition means any wastes, including wastes from humans, households, commercial establishments, industries, and stormwater runoff that are discharged to or otherwise enter a POTW.
28. **“7-day average”** Also known as “average weekly” means the highest allowable average of “daily discharges” over a calendar week, calculated as the sum of all “daily discharges” measured during a calendar week divided by the number of “daily discharges” measured during that week.
29. **“Treatment works”** means any devices and systems used in storage, treatment, recycling, and reclamation of municipal sewage and industrial wastes, of a liquid nature to implement section 201 of the Act, or necessary to recycle reuse water at the most economic cost over the

estimated life of the works, including intercepting sewers, sewage collection systems, pumping, power and other equipment, and alterations thereof; elements essential to provide a reliable recycled supply such as standby treatment units and clear well facilities, and any works, including site acquisition of the land that will be an integral part of the treatment process or is used for ultimate disposal of residues resulting from such treatment.

30. Units of Measure:

“MGD” shall mean million gallons per day.

“mg/l” shall mean milligrams per liter or parts per million (ppm).

“µg/l” shall mean micrograms per liter or parts per billion (ppb).

“cfs” shall mean cubic feet per second.

“ppm” shall mean parts per million.

“s.u.” shall mean standard units.

31. **“Upset”** means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. Any upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, lack of preventive maintenance, or careless or improper operations.
32. **“Visible sheen”** means the presence of a film or sheen upon or a discoloration of the surface of the discharge. A sheen can also be from a thin glistening layer of oil on the surface of the discharge.
33. **“Weekday”** means Monday – Friday.

Fact Sheet

This Fact Sheet is for information and justification of the permit limits only. Please note that it is not enforceable. This draft permitting decision is for renewal of the discharge Permit Number AR0001210 with Arkansas Department of Environmental Quality (ADEQ) Facility Identification Number (AFIN) 02-00013 to discharge to Waters of the State.

1. PERMITTING AUTHORITY.

The issuing office is:

Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317

2. APPLICANT.

The applicant's mailing address and physical location is:

Georgia-Pacific Crossett LLC
Crossett Paper Operations
100 Mill Supply Road
Crossett, AR 71635

3. PREPARED BY.

The permit was prepared by:

Loretta Reiber, P.E.
Engineer, P.E.
NPDES Discharge Permits Section
Office of Water Quality
(501) 682-0612
E-mail: reiber@adeq.state.ar.us

Carrie McWilliams, P.E.
Engineer Supervisor
NPDES Discharge Permits Section
Office of Water Quality
(501) 682-0915
E-mail: mcwilliamsc2@adeq.state.ar.us

4. PERMIT ACTIVITY.

Previous Permit Effective Date:	November 1, 2010
Previous Permit 1 st Modification Date:	July 1, 2011
Previous Permit 2 nd Modification Date:	October 30, 2015
Previous Permit Expiration Date:	October 31, 2015

The permittee submitted a permit renewal application on May 4, 2015, with all additional information received by August 20, 2015. It is proposed that the current discharge permit be reissued for a 5-year term in accordance with regulations promulgated at 40 CFR Part 122.46(a).

The permittee submitted the following requests with the renewal application.

Request 1: The permittee requested a reduction in the monitoring frequencies for chloroform, chlorophenolics, 2,3,7,8-TCDD, and 2,3,7,8-TCDF at the internal outfalls to once every six months. These parameters have not been detected at the internal outfalls during the term of the previous permit.

Response: The Department follows the EPA's *Interim Guidance for Performance-Based Reductions of NPDES Permit Monitoring Frequencies* when determining if the monitoring frequency for a specific parameter may be reduced. During the renewal which occurred in 2010, the required monitoring frequency for Chloroform was reduced from once/week to once/two months while the chlorophenolics, 2,3,7,8-TCDD, and 2,3,7,8-TCDF sampling frequencies were changed from once/month to once/quarter.

The Department does not further reduce monitoring frequencies which were reduced in the previous renewal. Since the monitoring frequency for Chloroform was reduced in the 2010 renewal, it cannot be further reduced at this time.

Request 2: The permittee has requested a permit condition be included reflecting an option to exercise chloroform certification in lieu of monitoring for chloroform in accordance with 40 CFR 430.02(f). Submittal of the required information in 40 CFR 430.02(f) and approval of the information by ADEQ would replace the monitoring requirements for chloroform.

Response: The Department will include Part II, Condition No. 20 in the permit to allow for the permittee to request exemption from the chloroform monitoring requirements since it is allowed by an applicable portion of 40 CFR Part 430. The facility will need to obtain a major modification of the permit prior to ceasing the chloroform monitoring.

Request 3: The permittee requested that the following Dieldrin limits at Outfall 001 and SMS 002 be removed from the permit since it has not been detected in the effluent during the term of the previous permit.

Parameter	AML, lb/day	DML, lb/day	AML, µg/l	DML, µg/l
Dieldrin	0.00034	0.0011	0.00091	0.00284

Response: Dieldrin was included in the previous permit to obtain additional data since it was only detected in one of the five tests. The Department is in agreement that the Dieldrin test results reported on the monthly DMRs have been below the detection level of 0.02 µg/l. The

permittee has submitted a certification that they do not use Dieldrin or Dieldrin containing substances. Therefore, the Dieldrin limits will be removed from the permit. See Item #11.B of this Fact Sheet for additional information.

A copy of the certification may be found using the following link:

https://www.adeg.state.ar.us/downloads/WebDatabases/PermitsOnline/NPDES/PermitInformation/AR0001210_No%20Dieldrin%20on%20Site%20Certification_20160114.pdf

Also, the Louisiana Department of Environmental Quality stated in an e-mail that Dieldrin limits could be removed. A copy of that e-mail may be found using the following link:

https://www.adeg.state.ar.us/downloads/WebDatabases/PermitsOnline/NPDES/PermitInformation/AR0001210_LA%20PPS%20Email_20151221.txt

Request 4: The permittee requested that the “24-hr composite” sample types be clarified to a “24 hour time composite.” Flow proportional sampling at Mossy Lake with a rectangular weir gate is not feasible due to the remoteness of the location and its risk of flooding and submergence of the flow measurement structure.

In an e-mail dated August 27, 2015, the permittee stated that there is a continuous flow meter as well as an auto sampler located at SMS002 and that both devices have their own battery power supply. The e-mail also stated that permanent facilities are not feasible since both units must be removed as required by seasonal flooding events. Also, the flows out of Mossy Lake typically do not vary by more than 10% in a 24-hour period except during large rain events.

Response: Time-proportional composite monitoring is appropriate when the flow of the sampled stream is constant, i.e., flow rate does not vary more than $\pm 10\%$ of the average flow rate, or when flow monitoring equipment is not available. This is consistent with Section 8.1.4.2 of the *U.S. Environmental Protection Agency NPDES Permit Writers' Manual*. It is well documented that flooding at SMS002 commonly occurs during the wet winter and spring months and conditions based on testing requirements when Mossy Lake is flooded have been incorporated into the permit. The Department therefore concurs that the types of monitoring equipment which may be used at this location are limited.

Therefore, based on the information submitted in the August 27th e-mail, the Department will allow the permittee to take time-weighted composite samples at SMS 002 in lieu of flow weighted composite samples.

Request 5: The permittee requested that the developmental requirements for the Mercury Minimization Plan (MMP) be deleted from the permit since the plan was developed as required after issuance of the previous permit.

Response: The request will be granted since the MMP was developed as required. The MMP condition will continue to retain the requirement to submit annual reports to the Department. Also, the condition will contain a requirement stating that the permittee must get Department approval for any changes to the MMP prior to implementation.

Request 6: In a letter dated March 1, 2016, the permittee requested that the chemical usage restrictions for Hydrogen Peroxide as well as the restrictions for the organic iron catalysts, AOTech CW and AOTech S, be removed from the permit. The purpose of the chemical usage is to control odor, not provide treatment of the wastewater. There are no adverse environmental impacts. To the contrary, the use of the chemicals has beneficially reduced odor in the community. The levels of BOD5 and color in the effluent have been reduced as well.

Response: Hydrogen Peroxide breaks down into water and oxygen, byproducts which will not harm the effluent or the water quality of the receiving stream. Therefore, the Hydrogen Peroxide usage requirements will be removed from the permit.

The purpose of the usage restrictions was to verify that the levels of Total Dissolved Iron are below that which would cause toxicity issues in the effluent. This purpose may also be achieved through the required WET testing and monitoring and reporting of the Total Dissolved Iron levels in the effluent at Outfall 001. Therefore, the usage restrictions for the organic iron catalysts have been replaced with a requirement to monitor and report the levels of Total Dissolved Iron in the effluent at Outfall 001.

Site Visit Request: During the site visit on August 4, 2015, the permittee asked if the permit could be drafted in a manner that would allow them to suspend monitoring at SMS 002 if the test results at Outfall 001 are below the limits applicable at SMS 002.

Response: BOD5, TSS, and pH are the only parameters with limits which the facility is required to monitor at both Outfall 001 and SMS002. Other permit limits, such as those for Copper and Zinc, are only required to be monitored at Outfall 001 when Mossy Lake is flooded. The permittee is required to monitor and report the Total Phosphorus and Nitrates test results for both locations.

The BOD5 and TSS limits at Outfall 001 are technology based and are water quality based at SMS 002. The pH limits at both locations are water quality based.

The permittee has complied with the BOD5, TSS, and pH permit limits during the term of the previous permit. However, the levels of BOD5 measured at Outfall 001 often exceed the BOD5 limits at SMS002. Also, the levels of TSS measured at Outfall 001 have exceeded the TSS limits at SMS 002.

Due to the length of time it takes the effluent to travel from Outfall 001 to SMS 002 and the watershed area between the two monitoring points, it would be difficult at best to try to

determine when the water leaving Outfall 001 will pass through SMS 002. Also, the test for BOD5 takes five days to complete which makes it impossible to determine if the levels at Outfall 001 are below the requirements for SMS 002 before samples must be taken at the transition from Mossy Lake to Coffee Creek.

The pH limits at both locations are identical and there have been no excursions outside the permitted range. However, the pH test may be easily conducted on site with a probe. There is a significant watershed area between Outfall 001 and SMS 002. It is unknown if runoff from that watershed could affect the pH at SMS 002.

Tests must be conducted at both locations in order to verify that the waters entering Coffee Creek from Mossy Lake are meeting the water quality standards in Reg. 2.504 and that the effluent at Outfall 001 is meeting the technology based requirements.

Therefore, the Department will not grant the request to suspend monitoring at SMS 002 if the test results are below the limits applicable at SMS 002.

DOCUMENT ABBREVIATIONS

In the document that follows, various abbreviations are used. They are as follows:

BAT - best available technology economically achievable
BCT - best conventional pollutant control technology
BMP - best management practice
BOD₅ - five-day biochemical oxygen demand
BPJ - best professional judgment
BPT - best practicable control technology currently available
CBOD₅ - carbonaceous biochemical oxygen demand
CD - critical dilution
CFR - Code of Federal Regulations
cfs - cubic feet per second
COD - chemical oxygen demand
COE - United States Corp of Engineers
CPP - continuing planning process
CWA - Clean Water Act
DMR - discharge monitoring report
DO - dissolved oxygen
ELG - effluent limitation guidelines
EPA - United States Environmental Protection Agency
ESA - Endangered Species Act
FCB - fecal coliform bacteria
gpm - gallons per minute
MGD - million gallons per day

MMP – Mercury Minimization Plan
MQL - minimum quantification level
NAICS - North American Industry Classification System
NH₃-N - ammonia nitrogen
NO₃ + NO₂-N - nitrate + nitrite nitrogen
NPDES - National Pollutant Discharge Elimination System
O&G - oil and grease
Reg. 2 - APCEC Regulation No. 2
Reg. 6 - APCEC Regulation No. 6
Reg. 8 - APCEC Regulation No. 8
Reg. 9 - APCEC Regulation No. 9
RP - reasonable potential
SIC - standard industrial classification
TDS - total dissolved solids
TMDL - total maximum daily load
TP - total phosphorus
TRC - total residual chlorine
TSS - total suspended solids
UAA - use attainability analysis
USF&WS - United States Fish and Wildlife Service
USGS – United States Geological Survey
WET - Whole effluent toxicity
WQMP - water quality management plan
WQS - Water Quality standards
WWTP - wastewater treatment plant

Compliance and Enforcement History:

Compliance and Enforcement History for this facility can be reviewed by using the following web link:

https://www.adeg.state.ar.us/downloads/WebDatabases/PermitsOnline/NPDES/PermitInformation/AR0001210_Final%20Compliance%20Memo_20150706.txt

5. SIGNIFICANT CHANGES FROM THE PREVIOUSLY ISSUED PERMIT.

The permittee is responsible for carefully reading the permit in detail and becoming familiar with all of the changes therein:

- a. The condition stating that the permittee has certified that they do not use zinc sulfites has been removed from the permit. This requirement is contained in 40 CFR Part 430, Subpart G – The Pulp, Paper, and Paperboard Point Source Category, Mechanical Pulp Subcategory. This facility operates a chemical pulp mill so it is not subject to that subpart.

The permittee is subject to the requirements of 40 CFR Part 430, Subpart B – The Pulp, Paper, and Paperboard Point Source Category, Bleached Papergrade Kraft and Soda Subcategory. It is important to note that the permittee is required by Part II, Section D, Item 1 to notify the Department of any changes which would affect the characteristics of the effluent.

- b. The Dieltrin limits have been removed from the permit. See the response to request 3 in Item #4 and Item #11.B of this Fact Sheet for additional information.
- c. The MMP language in Part II of the permit has been revised since the MMP has already been developed and implemented. The condition will continue to include the requirement to submit annual reports. The permittee will be required to submit any changes to the MMP to the Department for approval prior to implementation.
- d. Part II, Condition No. 20 has been added to the permit to allow the facility to request exemption from the Chloroform monitoring requirements as allowed by 40 CFR 430.02(f).
- e. The usage restrictions on the organic iron catalysts has been replaced with a requirement to monitor and report the levels of Total Dissolved Iron in the effluent at Outfall 001. See the response to Request #6 in Item #4 of this Fact Sheet for additional information.
- f. The facility coordinates have been corrected to reflect the location of the plant entrance.
- g. The Hydrogen Peroxide usage restrictions have been removed from Part II of the permit. See the response to Request #6 in Item #4 of this Fact Sheet for additional information.
- h. The flow sample type for the internal outfalls has been changed to calculated. See Item #14 of this Fact Sheet for additional information.
- i. *C. dubia* WET limits have been added to the permit. See Item #12 of this Fact Sheet for additional information.

6. RECEIVING STREAM SEGMENT AND DISCHARGE LOCATION.

The outfall is located at the following coordinates based on the May 26, 2009, site visit, Google Earth, and the permit application using NAD83:

Outfall 001:	Latitude : 33E 06' 22.5"; Longitude: 92E 02' 17.2"
SMS 002:	Latitude : 33E 01' 58"; Longitude: 92E 04' 25"
Internal Outfall 101:	Latitude : 33E 08' 29.5"; Longitude: 91E 58' 25.8"
Internal Outfall 102:	Latitude : 33E 08' 29.5"; Longitude: 91E 58' 25.8"
Internal Outfall 103:	Latitude : 33E 08' 29.5"; Longitude: 91E 58' 25.8"

The receiving waters named:

Outfall 001: through a man made channel to the upper reaches of Mossy Lake, then to Coffee Creek, then to the Ouachita River in Segment 2D of the Ouachita River Basin.

SMS 002: At the transition from Mossy Lake to Coffee Creek then into Ouachita River in Segment 2D of the Ouachita River Basin.

The fishable/swimmable as well as the domestic water supply uses were removed from Coffee Creek and Mossy Lake through a UAA.

The Ouachita River in H.U.C. 8040202 is a Water of the State classified for primary and secondary contact recreation, raw water source for domestic (public and private), industrial, and agricultural water supplies, propagation of desirable species of fish and other aquatic life, and other compatible uses.

7. **303(d) LIST, ENDANGERED SPECIES, AND ANTI-DEGRADATION CONSIDERATIONS.**

A. **303(d) List:**

Coffee Creek below Mossy Lake is not listed on the 303(d) list. However, Reach #002 of the Ouachita River in HUC 08040202 is on the 303(d) list for Mercury in Category 4a. A TMDL has been finalized for Mercury in Fish Tissue in the Ouachita River Basin. See Item No. 11.E of this Fact Sheet for additional information.

B. **Endangered Species:**

No comments on the application were received from the U.S. Fish and Wildlife Service (USF&WS). The draft permit and Fact Sheet will be sent to the USF&WS for their review.

C. **Anti-Degradation:**

The limitations and requirements set forth in this permit for discharge into waters of the State are consistent with the Antidegradation Policy and all other applicable water quality standards found in APC&EC Regulation No. 2.

8. **OUTFALL, TREATMENT PROCESS DESCRIPTION, AND FACILITY CONSTRUCTION.**

The following is a description of the facility described in the application:

A. Design Flow: 45 MGD

B. Type of Treatment: screening followed by primary clarifier, settling for ash removal, equalization, aerated lagoon with solids settling, sludge dewatering, chemical addition (hydrogen peroxide and iron catalyst) for odor control at the P2 sewer and the Chemical Plant as well as after screening but before the primary clarifier, and chemical addition of Iron salts at the aerated lagoon for reduction of sub-lethal activity. The permittee may move the points at which the chemicals without modifying the permit if Department approval is received.

- C. Discharge Description: Process wastewater (Pulp and Paper Mill, Plywood Plant and Studmill, and Chemical Plant operations including, but not limited to, truck wash wastewater, backwash wastewater, and product stewardship waters), sanitary wastewater, landfill leachate, site stormwater, and treated effluent from the City of Crossett.

Wastewater from the Paper Mill operations includes process wastewater from two board machines, five tissue machines, the pulp mill, the bleach plant, the recovery area, and the utilities area.

Wastewater from the Chemical Plant operations includes process water from the urea and phenol formaldehyde resins, formaldehyde production, and tall oil fractionization.

Vat water from the Plywood Plant and other process and non-process wastewaters from the Plywood Plant and Studmill may be directed to the treatment plant associated with this permit. This is allowed for an existing timber products complex as described in the original issuance of the Timber Products Effluent Guidelines (39 FR 13943).

The permittee has certified that less than 10% of the surface water intake is used for cooling purposes. Therefore, under 40 CFR 125.91(a)(3), the cooling water intake structure requirements of §§125.94 through 125.99 are not applicable to this facility.

- D. Facility Status: This facility was evaluated using the NPDES Permit Rating Worksheet (MRAT) to determine the correct permitting status. Since the facility's MRAT score of 160 is greater than 80, this facility is classified as a major industrial.
- E. Facility Construction: This permit does not authorize or approve the construction or modification of any part of the treatment system or facilities. Approval for such construction must be by permit issued under Reg. 6.202.

9. ACTIVITY.

Under the Standard Industrial Classification (SIC) code of 2621 or North American Industry Classification System (NAICS) code of 322121, the applicant's activities are the operation of paper mill. The permittee may receive wastewater from Georgia-Pacific's plywood facility (SIC = 2436 & 2439, NAICS = 321212 & 321213) and chemical plant (SIC = 2821, NAICS = 325211) in Crossett.

10. SOLIDS PRACTICES.

Solids are placed in the facility's north landfill (Permit No. 292-S3N) as necessary or in the facility's reclamation area. Solids may be reused for beneficial purposes through the application of sludge and/or dredged ash on agriculture or silviculture lands for soil amendment purposes upon approval from ADEQ. The sludge and/or dredged ash may also be marketed or distributed after approval is received from ADEQ.

11. DEVELOPMENT AND BASIS FOR PERMIT CONDITIONS.

The Arkansas Department of Environmental Quality has determined to issue a draft permit for the discharge described in the application. Permit requirements are based on federal regulations (40 CFR Parts 122, 124, and Subchapter N), the National Pretreatment Regulation in 40 CFR Part 403 and regulations promulgated pursuant to the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. 8-4-101 et. seq.). All of the information contained in the application, including all of the submitted effluent testing data, was reviewed to determine the need for effluent limits and other permit requirements.

The following is an explanation of the derivation of the conditions of the draft permit and the reasons for them or, in the case of notices of intent to deny or terminate, reasons suggesting the decisions as required under 40 CFR Part 124.7.

Technology-Based Versus Water Quality-Based Effluent Limitations and Conditions

Following regulations promulgated at 40 CFR Part 122.44, the draft permit limits are based on either technology-based effluent limits pursuant to 40 CFR Part 122.44 (a) or on State water quality standards and requirements pursuant to 40 CFR Part 122.44 (d), whichever are more stringent as follows:

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Parameter	Water Quality-Based		Technology-Based		Previous Permit		Draft Permit	
	Monthly Avg. mg/l	Daily Max. mg/l	Monthly Avg. mg/l	Daily Max. mg/l	Monthly Avg. mg/l	Daily Max. mg/l	Monthly Avg. mg/l	Daily Max. mg/l
OUTFALL 001								
BOD5 Concentration (mg/l)	N/A	N/A	64.4	123.8	64.4	123.8	64.4	123.8
Mass (lbs/day)	N/A	N/A	24155.4	46453.0	24155.4	46453.0	24155.4	46453.0
TSS Concentration (mg/l)	N/A	N/A	119.6	222.4	119.6	222.4	119.6	222.4
Mass (lbs/day)	N/A	N/A	37720	70188	37720	70188	37720	70188
2,3,7,8-TCDD	N/A	N/A	Report pg/l	Report pg/l	Report pg/l	Report pg/l	Report pg/l	Report pg/l
AOX, lbs/day	N/A	N/A	2146	3276	2146	3276	2146	3276
Total Recoverable Copper	N/A	N/A	18.75 µg/l	37.62 µg/l	18.75 µg/l	37.62 µg/l	18.75 µg/l	37.62 µg/l
Total Recoverable Zinc	N/A	N/A	194.58 µg/l	390.41 µg/l	194.58 µg/l	390.41 µg/l	194.58 µg/l	390.41 µg/l
Total Dissolved Iron	N/A	N/A	Report µg/l	Report µg/l	N/A	N/A	Report µg/l	Report µg/l
Total Phosphorous	N/A	N/A	Report	Report	Report	Report	Report	Report
Nitrates as Nitrogen	N/A	N/A	Report	Report	Report	Report	Report	Report
pH	N/A		5.0 – 9.0 s.u.		6.0 – 9.0 s.u.		6.0 – 9.0 s.u.	
Chronic WET <i>P. promelas</i>	N/A		Report %		Report %		Report %	
Chronic WET <i>C. dubia</i>	Not < 80%		N/A		Report %		Not < 80%	
SMS 002								
BOD5,								
October – July (lb/day)	8000	12000	N/A	N/A	8000	12000	8000	12000
August (lb/day)	7262	10893	N/A	N/A	7262	10893	7262	10893
September (lb/day)	5911	8867	N/A	N/A	5911	8867	5911	8867
TSS, lb/day	N/A	N/A	18000*	30000*	18000	30000	18000	30000
Total Recoverable Copper	19.30 µg/l	38.72 µg/l	N/A	N/A	18.75 µg/l	37.62 µg/l	18.75 µg/l	37.62 µg/l

Parameter	Water Quality-Based		Technology-Based		Previous Permit		Draft Permit	
	Monthly Avg. mg/l	Daily Max. mg/l	Monthly Avg. mg/l	Daily Max. mg/l	Monthly Avg. mg/l	Daily Max. mg/l	Monthly Avg. mg/l	Daily Max. mg/l
Total Recoverable Zinc	194.58 µg/l	390.41 µg/l	N/A	N/A	194.58 µg/l	390.41 µg/l	194.58 µg/l	390.41 µg/l
Total Phosphorous	N/A	N/A	Report	Report	Report	Report	Report	Report
Nitrates as Nitrogen	N/A	N/A	Report	Report	Report	Report	Report	Report
Change in Color of Receiving Stream	N/A	N/A	N/A	Report	N/A	Report	N/A	Report
pH	6.0 – 9.0 s.u.		N/A		6.0 – 9.0 s.u.		6.0 – 9.0 s.u.	
ALL INTERNAL OUTFALLS (101, 102, and 103)								
2,3,7,8-TCDD	N/A	N/A	N/A	<10 pg/l	N/A	<10 pg/l	N/A	<10 pg/l
2,3,7,8-TCDF	N/A	N/A	N/A	31.9 pg/l	N/A	31.9 pg/l	N/A	31.9 pg/l
Trichlorosyringol	N/A	N/A	N/A	< 2.5 µg/l	N/A	< 2.5 µg/l	N/A	< 2.5 µg/l
3,4,5-Trichlorocatechol	N/A	N/A	N/A	< 5.0 µg/l	N/A	< 5.0 µg/l	N/A	< 5.0 µg/l
3,4,6-Trichlorocatechol	N/A	N/A	N/A	< 5.0 µg/l	N/A	< 5.0 µg/l	N/A	< 5.0 µg/l
3,4,5-Trichloroguaiacol	N/A	N/A	N/A	< 2.5 µg/l	N/A	< 2.5 µg/l	N/A	< 2.5 µg/l
3,4,6-Trichloroguaiacol	N/A	N/A	N/A	< 2.5 µg/l	N/A	< 2.5 µg/l	N/A	< 2.5 µg/l
4,5,6-Trichloroguaiacol	N/A	N/A	N/A	< 2.5 µg/l	N/A	< 2.5 µg/l	N/A	< 2.5 µg/l
2,4,5-Trichlorophenol	N/A	N/A	N/A	< 2.5 µg/l	N/A	< 2.5 µg/l	N/A	< 2.5 µg/l
2,4,6-Trichlorophenol	N/A	N/A	N/A	< 2.5 µg/l	N/A	< 2.5 µg/l	N/A	< 2.5 µg/l
Tetrachlorocatechol	N/A	N/A	N/A	< 5.0 µg/l	N/A	< 5.0 µg/l	N/A	< 5.0 µg/l
Tetrachloroguaiacol	N/A	N/A	N/A	< 5.0 µg/l	N/A	< 5.0 µg/l	N/A	< 5.0 µg/l
2,3,4,6-Tetrachlorophenol	N/A	N/A	N/A	< 2.5 µg/l	N/A	< 2.5 µg/l	N/A	< 2.5 µg/l

Parameter	Water Quality-Based		Technology-Based		Previous Permit		Draft Permit	
	Monthly Avg. mg/l	Daily Max. mg/l	Monthly Avg. mg/l	Daily Max. mg/l	Monthly Avg. mg/l	Daily Max. mg/l	Monthly Avg. mg/l	Daily Max. mg/l
Pentachlorophenol	N/A	N/A	N/A	<5.0 µg/l	N/A	<5.0 µg/l	N/A	<5.0 µg/l
Chloroform at Outfall 101	N/A	N/A	4.78 lb/day	7.99 lb/day	4.78 lb/day	7.99 lb/day	4.78 lb/day	7.99 lb/day
Chloroform at Outfall 102	N/A	N/A	4.78 lb/day	7.99 lb/day	4.78 lb/day	7.99 lb/day	4.78 lb/day	7.99 lb/day
Chloroform at Outfall 103	N/A	N/A	4.81 lb/day	8.04 lb/day	4.81 lb/day	8.04 lb/day	4.81 lb/day	8.04 lb/day

*Limits accepted by permittee during the response to comments on the previous draft renewal permit. Study determined higher levels of TSS could be discharged without harm to the Ouachita River.

A. Justification for Limitations and Conditions of the Draft Permit

Parameter	Water Quality or Technology	Justification
Outfall 001		
BOD5	Technology	40 CFR 430.22(a), 40 CFR 122.44(l), and previous permit (see Item #11.F of this Fact Sheet for additional information)
TSS	Technology	40 CFR 430.22(a), 40 CFR 122.44(l), and previous permit (see Item #11.F of this Fact Sheet for additional information)
2,3,7,8-TCDD	Technology	40 CFR 122.44(l) and previous permit
AOX	Technology	40 CFR 430.24(a)(1), 40 CFR 122.44(l), and previous permit
Total Recoverable Copper	Technology	40 CFR 122.44(l) and previous permit
Total Recoverable Zinc	Technology	40 CFR 122.44(l) and previous permit
Total Phosphorous	Technology	use of nutrients in WWTP, 40 CFR 122.44(l), and previous permit
Total Dissolved Iron	Technology	use of organic iron catalysts and iron salts in the treatment of the wastewater
Nitrates as Nitrogen	Technology	use of nutrients in WWTP, 40 CFR 122.44(l), and previous permit
pH	Technology	40 CFR 122.44(l) and previous permit (note: the pH range required by 40 CFR Part 430, Subpart B is less stringent at 5.0 – 9.0 s.u.)
SMS 002		

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Parameter	Water Quality or Technology	Justification
BOD5		
October – July	Water Quality	Modeling analysis conducted by AquaTer dated April 1999 and reviewed October 2015, CWA§402(o), and previous permit
August	Water Quality	Modeling analysis conducted by AquaTer dated April 1999 and reviewed October 2015, CWA§402(o), and previous permit
September	Water Quality	Modeling analysis conducted by AquaTer dated April 1999 and reviewed October 2015, CWA§402(o), and previous permit
TSS	Technology	Modeling analysis conducted by AquaTer dated April 1999 and reviewed October 2015, Response to Comments for renewal permit with an effective date of September 1, 2004, 40 CFR 122.44(l), and previous permit
Total Recoverable Copper	Technology	40 CFR 122.44(l) and previous permit
Total Recoverable Zinc	Technology	40 CFR 122.44(l) and previous permit
Total Phosphorous	Technology	use of nutrients in WWTP, 40 CFR 122.44(l), and previous permit
Nitrates as Nitrogen	Technology	use of nutrients in WWTP, 40 CFR 122.44(l), and previous permit
Change in Color of Receiving Stream	Technology	40 CFR 122.44(l) and previous permit
pH	Water Quality	CWA §402(o) and previous permit, to ensure effluent is within the range listed in Reg. 2.504 when it enters the Ouachita River
All Internal Outfalls (101, 102, and 103)		
TCDD	Technology	40 CFR 430.24(a)(1), 40 CFR 122.44(l), and previous permit
TCDF	Technology	40 CFR 430.24(a)(1), 40 CFR 122.44(l), and previous permit
Trichlorosyringol	Technology	40 CFR 430.24(a)(1), 40 CFR 122.44(l), and previous permit
3,4,5-Trichlorocatechol	Technology	40 CFR 430.24(a)(1), 40 CFR 122.44(l), and previous permit
3,4,6-Trichlorocatechol	Technology	40 CFR 430.24(a)(1), 40 CFR 122.44(l), and previous permit
3,4,5-Trichloroguaiacol	Technology	40 CFR 430.24(a)(1), 40 CFR 122.44(l), and previous permit

Parameter	Water Quality or Technology	Justification
3,4,6-Trichloroguaiacol	Technology	40 CFR 430.24(a)(1), 40 CFR 122.44(l), and previous permit
4,5,6-Trichloroguaiacol	Technology	40 CFR 430.24(a)(1), 40 CFR 122.44(l), and previous permit
2,4,5-Trichlorophenol	Technology	40 CFR 430.24(a)(1), 40 CFR 122.44(l), and previous permit
2,4,6-Trichlorophenol	Technology	40 CFR 430.24(a)(1), 40 CFR 122.44(l), and previous permit
Tetrachlorocatechol	Technology	40 CFR 430.24(a)(1), 40 CFR 122.44(l), and previous permit
Tetrachloroguaiacol	Technology	40 CFR 430.24(a)(1), 40 CFR 122.44(l), and previous permit
2,3,4,6-Tetrachlorophenol	Technology	40 CFR 430.24(a)(1), 40 CFR 122.44(l), and previous permit
Pentachlorophenol	Technology	40 CFR 430.24(a)(1), 40 CFR 122.44(l), and previous permit

With the exception of the Dieldrin limit and the chronic WET limit for *C. dubia*, no permit limits are changing, being deleted, or being added with this permit renewal. See the response to Request #3 in Item #4 and Item #11.B of this Fact Sheet for additional information concerning Dieldrin. See Item #12 of this Fact Sheet for additional information concerning the addition of the WET limit.

A monitoring and reporting requirement for Total Dissolved Iron has been added to the permit at Outfall 001. This requirement is replacing the chemical usage restrictions placed on the organic iron catalysts. See the response to Request #6 in Item #4 of this Fact Sheet for additional information.

B. Anti-backsliding

The draft permit is consistent with the requirements to meet Anti-backsliding provisions of the Clean Water Act (CWA), Section 402(o) [40 CFR 122.44(l)]. The final effluent limitations for reissuance permits must be as stringent as those in the previous permit, unless the less stringent limitations can be justified using exceptions listed in CWA 402(o)(2), CWA 303(d)(4), or 40 CFR 122.44 (l)(2)(i).

With the exception of the removal of the Dieldrin limit, the draft permit meets or exceeds the requirements of the previous permit. The Dieldrin limit was removed for the following reasons:

- It was included in the previous permit on the basis of one test result;

- It has not been detected in the effluent during the term of the current permit; and
- The permittee has certified that they do not use Dieldrin or Dieldrin containing substances.

The removal of the Dieldrin limit does not violate the anti-backsliding standards of CWA § 402(o) since it is based on new information.

C. Limits Calculations

1. Mass limits:

In accordance with 40 CFR 122.45(f)(1), all pollutants limited in permits shall have limitations expressed in terms of mass if feasible. 40 CFR 122.45(f)(2) allows for pollutants which are limited in terms of mass to also be limited in terms of other units of measurement.

The mass limits for BOD5, TSS, and AOX at Outfall 001 are based on 40 CFR 430, Subpart B. The concentration limits for BOD5 and TSS were calculated using the mass limits, a flow of 45 MGD, and the following equation:

$$\text{Concentration (mg/l)} = \text{Mass, lbs/day} / (\text{Flow (MGD)} \times 8.34)$$

The mass limits for Total Recoverable Copper and Total Recoverable Zinc at Outfall 001 and SMS 002 are calculated using the concentration limits calculated with the PPS, a flow of 45 MGD, and the following equation:

$$\text{Mass, lbs/day} = [\text{Concentration (}\mu\text{g/l)/1000}] \times \text{Flow (MGD)} \times 8.34$$

The mass limits for BOD5 and TSS at SMS 002 were determined through the modeling study.

2. Daily Maximum Limits:

The daily maximum BOD5, TSS, and AOX limits at Outfall 001 are based on the ELGs in 40 CFR 430, Subpart B.

The daily maximum limits at SMS 002 for BOD5 and TSS are based on Section 5.4.2 of the Technical Support Document for Water Quality-Based Toxics Control.

$$\text{Daily Maximum limits} = \text{Monthly average limits} \times 1.5$$

The daily maximum limits for Total Recoverable Copper and Total Recoverable Zinc are based on the procedures for toxics outlined in Appendix D of the CPP.

D. 208 Plan (Water Quality Management Plan)

No changes to the 208 Plan are proposed with this permit renewal.

E. Total Maximum Daily Load (TMDL)

The permittee is listed in Table A.1 of *TMDLs for Segments Listed for Mercury in Fish Tissue for the Ouachita River Basin, and Bayou Bartholomew, Arkansas and Louisiana to Columbia*. As a result, the permit includes a Mercury Minimization Plan which is continued from the previous permit. A copy of the TMDL may be found using the following link:

http://www2.adeg.state.ar.us/downloads/WebDatabases/Water/TMDL/pdfs/Ouachita_and_Bayou Bartholomew Hg 2002 12 18 Final.pdf

F. Applicable Effluent Limitations Guidelines

Discharges from facilities of this type are covered by Federal effluent limitations guidelines promulgated under 40 CFR Part 430, Subpart B – The Pulp, Paper, and Paperboard Point Source Category, Bleached Papergrade Kraft and Soda Subcategory.

The permittee has submitted data with the renewal application demonstrating that production increases of over 20% have occurred since issuance of the previous permit.

Item	Previous Permit	Draft Permit	% Difference
Fine Paper	257 tpd	419 tpd	63.04%
Paperboard and Tissue Paper	1502 tpd	1914 tpd	27.43%
Unbleached Pulp	1735 tpd	2333 tpd	34.47%

Typically, with increases over 20%, the Department will raise the limits based on this new information. However, the permittee has agreed to retain the previous permit limits based on 40 CFR 430 Subpart B. A copy of the letter agreeing to maintain the current permit limits may be found using the following link:

https://www.adeg.state.ar.us/downloads/WebDatabases/PermitsOnline/NPDES/PermitInformation/AR0001210_Request%20to%20increase%20BOP5_20150820.PDF

A copy of the limit calculations may be found in the Fact Sheet for the permit with an effective date of November 1, 2010. A copy of that permit may be found using the following link:

https://www.adeg.state.ar.us/downloads/WebDatabases/PermitsOnline/NPDES/IssuedPermits/AR0001210_Renewal_20100930.pdf

G. **Priority Pollutant Scan (PPS)**

As stated on page A-31 of Reg. 2, Chapter 5 of Reg. 2 does not apply to Mossy Lake and Coffee Creek. Therefore, toxics limits based on levels in the effluent at Outfall 001 have not been calculated.

Reasonable potential calculations for exceedances of the water quality criteria based on the conditions of the Ouachita River have been performed.

SMS002 is a monitoring point approximately 2.5 miles upstream of the Arkansas/Louisiana state line. The methods for calculating the background flows based upon the 7Q10, TSS, hardness, etc. are based upon ADEQ's CPP and LDEQ's requirements in Title 33, Part IX, Subpart 1 and "Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, Water Quality Management Plan Volume 3." All data submitted was evaluated using both ADEQ's and LDEQ's methods.

ADEQ has reviewed and evaluated the effluent in accordance with the potential toxicity of each analyzed pollutant using the procedures outlined in the Continuing Planning Process (CPP). LDEQ reviewed and evaluated the effluent in accordance with their procedures outlined in Title 33, Part IX, Subpart 1 and Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, Water Quality Management Plan Volume 3, October 26, 2010 – Version 8.

The concentration of each pollutant after mixing with the Ouachita River was compared to the applicable water quality standards as established in the Arkansas Water Quality Standards (AWQS), Regulation No. 2 (Reg. 2.508) and criteria obtained from the "Quality Criteria for Water, 1986 (Gold Book)" as well as the applicable regulations for the State of Louisiana.

Under Federal Regulation 40 CFR Part 122.44(d), as adopted by Regulation No. 6, if a discharge poses the reasonable potential to cause or contribute to an exceedance above a water quality standard, the permit must contain an effluent limitation for that pollutant. Effluent limitations for the toxicants listed below have been derived in a manner consistent with the Technical Support Document (TSD) for Water Quality-based Toxics Control (EPA, March 1991), the CPP, and 40 CFR Part 122.45(c).

The following items were used in calculations:

Parameter	Value	Source
Data Applicable to Calculations for AR and LA		
Discharge Flow = Q	45 MGD = 69.525 cfs	Application
7Q10 Background Flow	802 cfs	EPA letter dated July 3, 2001
Arsenic Background Conc.	0.29 µg/l	OUA0008B
Mercury Background Conc.	N/A	not detected at OUA0008B
Nickel Background Conc.	0.25 µg/l	OUA0008B
pH	6.86 s.u.	Avg. pH @ OUA0008B, Jan. 1, 2010 – July 1, 2015
Arkansas Calculations		
LTA Background Flow	4509 cfs	USGS StreamStats, station 07364100
TSS	5.5 mg/l	CPP – Attachment V of Appendix D
Hardness as CaCo3	28 mg/l	CPP – Attachment VI of Appendix D
% 7Q10 Flow for Acute Criteria Calculations	6% (48.12 cfs)	CPP (Appendix D.IV.A) and 7Q10 listed above
% 7Q10 Flow for Chronic Criteria Calculations	25% (200.5 cfs)	CPP (Appendix D.IV.A) and 7Q10 listed above
Louisiana Calculations		
TSS	8 mg/l	LDEQ e-mail
Hardness as CaCo3	36.4 mg/l	LDEQ e-mail
Flow Used to Determine RP for Noncarcinogenic Pollutants	7Q10 = 802 cfs	Title 33, Part IX, Subpart 1, Section 1113, Table 2B
% 7Q10 Flow for Acute Criteria Calculations	3.3% (26.47 cfs)	Title 33, Part IX, Subpart 1, Section 1113, Table 2A and 7Q10 listed above
% 7Q10 Flow for Chronic Criteria Calculations	33% (264.66 cfs)	Title 33, Part IX, Subpart 1, Section 1113, Table 2A and 7Q10 listed above

The following pollutant levels were reported on the PPS submitted with the renewal application. The MQLs required by this Department and the Louisiana Department of Environmental Quality are listed in the table below. Zinc and Copper were not evaluated with this permit renewal since the previous permit limits are being continued unchanged.

Pollutant	Concentration Reported, $\mu\text{g/l}$	ADEQ MQL, $\mu\text{g/l}$	LDEQ MQL, $\mu\text{g/l}$
Total Rec. Arsenic	1.7	0.5	5
Total Rec. Mercury	0.009	0.005	0.0005/0.005
Total Rec. Nickel	9.2	0.5	5
Total Phenols	17	5	5
Bis(2-ethylhexyl)phthalate	190	10	10

Instream Waste Concentrations (IWC's) were calculated in the manner described in Appendix D of the CPP (for Arkansas criteria) as well as in the manner described in the *Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, Water Quality Management Plan Volume 3*, version 8, and compared to the applicable Criteria. The following tables summarize the results of the analysis for both states. The complete evaluations can be viewed on the Department's website at the following addresses:

Arkansas Standards

https://www.adeq.state.ar.us/downloads/WebDatabases/PermitsOnline/NPDES/PermitInformation/AR0001210_PPS%20Using%20Updated%207Q10_20160430.pdf

Louisiana Standards

https://www.adeq.state.ar.us/downloads/WebDatabases/PermitsOnline/NPDES/PermitInformation/AR0001210_LA%20PPS%20Spreadsheet%20Calculations_20151221.pdf

1. Aquatic Toxicity Evaluation

a. Acute Criteria Evaluation

Arkansas does not have acute criteria for Arsenic or Phenols. However, Louisiana regulations contain acute criteria for both parameters. Therefore, Arsenic and Phenols have only been included in the Louisiana Criteria Calculations.

Pollutant	Concentration Reported (C _e) µg/l	Est. 95 th Percentile (C _e x 2.13 ¹)	Instream Waste Concentration (IWC)	Criteria ²	Reasonable Potential (Yes/No)
			Acute, µg/l	Acute, µg/l	
ARKANSAS CRITERIA CALCULATIONS					
Total Rec. Mercury	0.009	0.01917	0.0113	6.70	NO
Total Rec. Nickel	9.2	19.60	11.68	973.88	NO
LOUISIANA CRITERIA CALCULATIONS					
Total Rec. Arsenic	1.7	3.62	2.62	339.8 ⁴	NO
Total Rec. Mercury	0.009	0.01917	0.0139	2.04 ⁴	NO
Total Rec. Nickel	9.2	19.60	14.19	1325.89 ⁴	NO
Total Phenols	17	36.21	26.23	700 ³	NO

¹ Statistical ratio used to estimate the 95th percentile using a single effluent concentration or the geometric mean of a dataset.

² Criteria are from Reg. 2.508 unless otherwise specified.

³ Criteria from Title 33, Part IX, Subpart 1, Section 1113, Table 1.

⁴ Criteria from Title 33, Part IX, Subpart 1, Section 1113, Table 1A.

b. Chronic Criteria Evaluation

Arkansas does not have chronic criteria for Arsenic or Phenols. However, Louisiana regulations contain chronic criteria for both parameters. Therefore, Arsenic and Phenols have only been included in the Louisiana Criteria Calculations.

Pollutant	Concentration Reported (C _e) µg/l	Est. 95 th Percentile (C _e x 2.13 ¹)	Instream Waste Concentration (IWC)	Criteria ²	Reasonable Potential (Yes/No)
			Chronic, µg/l	Chronic, µg/l	
ARKANSAS CRITERIA CALCULATIONS					
Total Rec. Mercury	0.009	0.01917	0.0049	0.012	NO
Total Rec. Nickel	9.2	19.60	5.23	108.16	NO
LOUISIANA CRITERIA CALCULATIONS					
Total Rec. Arsenic	1.7	3.62	0.75	150 ⁴	NO
Total Rec. Mercury	0.009	0.01917	0.0040	0.012 ⁴	NO

Pollutant	Concentration Reported (C _e) µg/l	Est. 95 th Percentile (C _e x 2.13 ¹)	Instream Waste Concentration (IWC)	Criteria ²	Reasonable Potential (Yes/No)
			Chronic, µg/l	Chronic, µg/l	
Total Rec. Nickel	9.2	19.60	4.08	147.37 ⁴	NO
Total Phenols	17	36.21	7.53	350 ³	NO

¹ Statistical ratio used to estimate the 95th percentile using a single effluent concentration or the geometric mean of a dataset.

² Criteria are from Reg. 2.508 unless otherwise specified.

³ Criteria from Title 33, Part IX, Subpart 1, Section 1113, Table 1.

⁴ Criteria from Title 33, Part IX, Subpart 1, Section 1113, Table 1A.

2. Human Health (Bioaccumulation) Evaluation

Pollutant	Concentration Reported (C _e) µg/l	Est. 95 th Percentile (C _e x 2.13 ¹)	Instream Waste Concentration (IWC)	Criteria ²	Reasonable Potential (Yes/No)
ARKANSAS CALCULATIONS					
Total Rec. Arsenic	1.7	3.62	0.34	1.4 ³	NO
Total Phenols	17	36.21	0.55	3500 ⁴	NO
Bis(2-ethylhexyl)phthalate	190	404.7	6.15	220 ³	NO
LOUISIANA CRITERIA CALCULATIONS					
Total Rec. Arsenic ⁷	1.7	3.62	0.20	10 ⁶	NO
Total Rec. Mercury ⁷	0.009	0.01917	0.0010	2.0 ⁶	NO
Total Phenols ⁷	17	36.21	1.98	5 ⁵	NO

¹ Statistical ratio used to estimate the 95th percentile using a single effluent concentration or the geometric mean of a dataset.

² Criteria are from Reg. 2.508 unless otherwise specified.

³ Adapted from "National Recommended Water Quality Criteria: 2002 – Human Health Criteria Calculation Matrix", EPA. The respective WQC from the noted reference are Consumption of Organism Only values. The values from the reference are for a lifetime risk factor of 10⁻⁶. These values have been multiplied by 10 to correspond with the human health criteria lifetime risk factor of 10⁻⁵ as stated in Reg. 2.508.

⁴ EPA Gold Book Criteria.

⁵ Criteria from Title 33, Part IX, Subpart 1, Section 1113, Table 1.

⁶ Criteria from Title 33, Part IX, Subpart 1, Section 1113, Table 1A.

⁷ Classified as noncarcinogenic by *Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards Water Quality Management Plan Volume 3*, October 2010.

ADEQ has determined from the submitted information that the discharge does not pose the reasonable potential to cause or contribute to an exceedance above a listed criteria for Arkansas or Louisiana.

12. WHOLE EFFLUENT TOXICITY.

Section 101(a)(3) of the Clean Water Act states that ".....it is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited....." To ensure that the CWA's prohibitions for toxics are met, EPA has issued a "Policy for the Development of Water Quality-Based Permit Limitations for Toxic Pollutants (49 FR 9016-9019, 3/9/84)." In support of the national policy, Region 6 adopted the "Policy for Post Third Round NPDES Permitting" and the "Post Third Round NPDES Permit Implementation Strategy" on October 1, 1992. In addition, ADEQ is required under 40 CFR Part 122.44(d)(1), adopted by reference in Regulation 6, to include conditions as necessary to achieve water quality standards as established under Section 303 of the Clean Water Act.

The Regional policy and strategy are designed to ensure that no source will be allowed to discharge any wastewater which (1) results in instream aquatic toxicity; (2) causes a violation of an applicable narrative or numerical State Water Quality Standard (WQS) resulting in non-conformance with the provisions of 40 CFR Part 122.44(d); (3) results in the endangerment of a drinking water supply; or (4) results in aquatic bioaccumulation which threatens human health.

Whole effluent toxicity (WET) testing has been established for assessing and protecting against impacts upon water quality and designated uses caused by the aggregate toxic effect of the discharge of pollutants. The stipulated test species, which are appropriate to measure whole effluent toxicity, are consistent with the requirements of the State Water Quality Standards. The WET testing frequency has been established to reflect the likelihood of ambient toxicity and to provide data representative of the toxic potential of the facility's discharge, in accordance with the regulations promulgated at 40 CFR Part 122.48.

Implementation

Arkansas has established a narrative water quality standard under the authority of Section 303 of the CWA which states "toxic materials shall not be present in receiving waters in such quantities as to be toxic to human, animal, plant or aquatic life or to interfere with the normal propagation, growth and survival of aquatic biota."

Whole effluent toxicity testing conducted by the permittee has shown potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body, at the appropriate instream critical dilution. Pursuant to 40 CFR 122.44(d)(1)(v), ADEQ has determined from the permittee's self reporting that the discharge from this facility does have the reasonable potential to cause, or contribute to an instream excursion above the narrative

standard within the applicable State Water Quality Standards, in violation of Section 101(a)(3) of the Clean Water Act. Therefore, the draft permit must establish both monthly average and 7-day minimum effluent limitations for *C. dubia* following Regulations promulgated by 40 CFR 122.44(d)(1)(v). These effluent limitations for *C. dubia* (7-day NOEC) are applied at Outfall 001 effective three years from the effective date of the permit.. [Prior to three years from the effective date of the permit, the draft permit requires monitoring and reporting only for *C. dubia* toxicity with no limitations being established. The daily average toxicity (7-day NOEC) and 7-day minimum toxicity (7-day NOEC) value shall not be less than 80% (Critical Dilution) effluent for Outfall 001.

WET testing of the effluent is thereby required as a condition of this permit to assess potential toxicity. The WET testing procedures stipulated as a condition of this permit are as follows:

TOXICITY TESTS

Chronic WET

FREQUENCY

Once/quarter

Requirements for measurement frequency are based on the CPP.

Although the 7Q10 is greater than 100 cfs (ft³/sec), the dilution ratio is less than 100:1. Therefore, chronic WET testing requirements will be included in the permit.

The calculations for determining the critical dilution (CD) used for chronic WET testing are continued unchanged from the previous permit. See Appendix D, Attachment V, Section IV of the CPP for additional information concerning this method of calculating the critical dilution.

$$CD = [(2.8 \times D \times 3.14^{0.5}) / y] \times 100$$

D = Diameter of discharge pipe = 4 ft and y = 25 for (Zone of Initial Dilution) ZID

$$CD = [(2.8 \times 4 \times 3.14^{0.5}) / 25] \times 100 = 80\%$$

Toxicity tests shall be performed in accordance with protocols described in "Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms", EPA/600/4-91/002, July 1994. A minimum of five effluent dilutions in addition to an appropriate control (0%) are to be used in the toxicity tests. These additional effluent concentrations are 25%, 34%, 45%, 60%, & 80% (See the CPP). The low-flow effluent concentration (critical dilution) is defined as 80% effluent. The requirement for chronic WET tests is based on the magnitude of the facility's discharge with respect to receiving stream flow. The stipulated test species, *Ceriodaphnia dubia* and the Fathead minnow (*Pimephales promelas*) are representative of organisms indigenous to the geographic area of the facility; the use of these is consistent with the requirements of the State water quality standards. The WET

testing frequency has been established to provide data representative of the toxic potential of the facility's discharge, in accordance with the regulations promulgated at 40 CFR Part 122.48.

Results of all dilutions as well as the associated chemical monitoring of pH, temperature, hardness, dissolved oxygen conductivity, and alkalinity shall be reported according to EPA-821-R-02-013, October 2002 and shall be submitted as an attachment to the Discharge Monitoring Report (DMR).

This permit may be reopened to require further WET testing studies, Toxicity Reduction Evaluation (TRE) and/or effluent limits if WET testing data submitted to the Department shows toxicity in the permittee's discharge. Modification or revocation of this permit is subject to the provisions of 40 CFR 122.62, as adopted by reference in APC&EC Regulation No. 6. Increased or intensified toxicity testing may also be required in accordance with Section 308 of the Clean Water Act and Section 8- 4-201 of the Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended).

Administrative Records

The following information summarizes toxicity tests submitted by the permittee during the term of the current permit at Outfall 001.

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Permit Number:	AR0001210	AFIN: 02-00013		Outfall Number:	001
Date of Review:	2/14/2017	Reviewer: M. Barnett			
Facility Name:	Georgia-Pacific LLC – Crossett Paper Operations				
Previous Dilution series:	25, 34, 45, 60, 80	Proposed Dilution Series:	25, 34, 45, 60, 80		
Previous Critical Dilution:	80	Proposed Critical Dilution:	80		
Previous TRE activities:	C. dubia sub-lethal TRE. TRE plan received July 14, 2011. Final TRE report received August 22, 2013.				
Frequency recommendation by species					
Pimephales promelas (Fathead minnow):	once per quarter				
Ceriodaphnia dubia (water flea):	once per quarter				
TEST DATA SUMMARY					
TEST DATE	Vertebrate (Pimephales promelas)		Invertebrate (Ceriodaphnia dubia)		
	Lethal	Sub-Lethal	Lethal	Sub-Lethal	
	NOEC	NOEC	NOEC	NOEC	
1/31/2012	80	80	80	80	Undergoing TRE
2/29/2012			80	80	
3/30/2012	80	80	80	80	
4/30/2012	80	80	80	60	
5/30/2012			80	45	
6/30/2012	80	80	80	34	
7/31/2012	80	80	80	80	
8/31/2012			80	60	
9/30/2012	80	80	80	80	
10/31/2012			80	80	
11/30/2012	80	80	80	60	
12/31/2012			80	80	
2/28/2013	80	80	80	34	
3/30/2013	80	80	80	25	
5/30/2013			80	60	
6/30/2013	80	80	80	80	
7/30/2013			80	80	
8/31/2013	80	80	80	80	1 TRE end
10/31/2013	80	80	80	60	
11/30/2013			80	60	
12/31/2013	80	80	80	34	
1/31/2014	80	80	80	45	
2/28/2014	80	80	80	80	
3/30/2014	80	80	80	45	
4/30/2014			80	80	
5/31/2014			80	80	
6/30/2014	80	80	80	80	2
7/31/2014	80	80	80	80	
8/31/2014			80	80	3
9/30/2014	80	80	80	80	
10/31/2014			80	80	
11/30/2014			80	80	
12/31/2014	80	80	80	80	
1/31/2015			80	80	4
2/28/2015	80	80	80	80	5
3/31/2015	80	80	80	80	6
4/30/2015			80	80	7
6/30/2015	80	80	80	80	
8/31/2015	80	80	80	80	
10/31/2015	80	80	80	80	8
12/31/2015	80	80	80	80	

1/31/2016	80	80	80	45	
2/29/2016			80	60	9
3/31/2016			80	80	10
4/30/2016	80	80	80	80	
6/30/2016	80	80	80	80	
8/31/2016	80	80	80	80	
10/31/2016	80	80	80	80	
12/31/2016	80	80	80	80	

Failures noted in BOLD

REASONABLE POTENTIAL CALCULATIONS

	Vertebrate Lethal	Vertebrate Sub-lethal	Invertebrate Lethal	Invertebrate Sub-Lethal
Min NOEC Observed	80	80	80	25
TU at Min Observed	1.25	1.25	1.25	4.00
Count	32	32	49	49
Failure Count During TRE	0	0	0	8
Failure Count Post TRE	0	0	0	7
Mean	1.250	1.250	1.250	1.549
Std. Dev.	0.000	0.000	0.000	0.591
CV	0	0	0	0.4
RPMF	0	0	0	1.2
Reasonable Potential	0.000	0.000	0.000	3.840
100/Critical dilution	1.250	1.250	1.250	1.250
Does Reasonable Potential Exist	No	No	No	Yes

PERMIT ACTION

P. promelas Chronic - monitoring

C. dubia Chronic - limit 80% 51710 - 3 year schedule of compliance

Additional requirements (including WET Limits) rationale/comments concerning permitting:

Reasonable Potential does not exist for *P. promelas* lethality or sub-lethality, or *C. dubia* lethality.

Reasonable potential exists for *C. dubia* sub-lethality. Permit will include a 3 year compliance schedule for the *C. dubia* chronic limits.

The permittee shall submit progress reports addressing the progress towards attaining the final effluent limits for *C. dubia* chronic according to the following schedule:

ACTIVITY

DUE DATE

Progress Report

One (1) year from effective date

Progress Report

Two (2) years from effective date

Achieve Final Limits

Three (3) years from effective date

Compliance with final limits for *C. dubia* chronic limits is required three (3) years from the effective date of the permit.

13. STORMWATER REQUIREMENTS

The federal regulations at 40 CFR 122.26(b)(14) require certain industrial sectors to have NPDES permit coverage for stormwater discharges from the facility. These requirements include the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) to control the quality of stormwater discharges from the facility. This facility was issued stormwater permit coverage under NPDES Tracking number ARR00A776.

14. SAMPLE TYPE AND FREQUENCY.

With the exception of the flow sample type for the internal outfalls, the requirements for sample type and sampling frequency have been based on the current discharge permit.

The flow sample type at the three internal outfalls has been changed to calculated. Part II, Condition No. 24 of the permit allows the permittee to calculate flow for the internal outfalls based on a summation of measured flow rates and flows from material balances. The permittee is required to submit the methodology of the calculation used for each internal outfall within 60 days of the effective date of the permit to the Department for approval.

The sample type and monitoring frequency for Total Dissolved Iron has been set at the requirements for other metals at Outfall 001.

Monitoring at SMS 002 is not required when Mossy Lake is flooded. As stated in Part IA of the permit, a flooded state is defined as the period when the gauge at the Felsenthal Lock and Dam exceeds 62 feet and also for the two weeks following the recession of flood waters below 62 feet. This condition has been continued from the previous permit because the permittee cannot obtain representative samples of the waters leaving Mossy Lake when it is considered to be flooded.

Parameter	Previous Permit		Final Permit	
	Frequency of Sample	Sample Type	Frequency of Sample	Sample Type
OUTFALL 001				
Flow	Once/day	Totalizing meter	Once/day	Totalizing meter
BOD5	Three/week	24-hr composite	Three/week	24-hr composite
TSS	Three/week	24-hr composite	Three/week	24-hr composite
2,3,7,8-TCDD	Once/quarter	24-hr composite	Once/quarter	24-hr composite
AOX	Three/week	24-hr composite	Three/week	24-hr composite
Total Recoverable Copper	Once/month	24-hr composite*	Once/month	24-hr composite ¹

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Parameter	Previous Permit		Final Permit	
	Frequency of Sample	Sample Type	Frequency of Sample	Sample Type
Total Recoverable Zinc	Once/month	24-hr composite*	Once/month	24-hr composite ¹
Total Phosphorous	Once/month	24-hr composite	Once/month	24-hr composite
Total Dissolved Iron	N/A	N/A	Once/month	24-hr composite ¹
Nitrates as Nitrogen	Once/month	24-hr composite	Once/month	24-hr composite
pH	Three/week	Grab	Three/week	Grab
Chronic WET	Once/2 months	24-hr composite	Once/2 months	24-hr composite
SMS 002				
Flow	Once/day	Totalizing meter	Once/day	Totalizing meter
BOD5				
October – July	Three/week	24-hr composite	Three/week	24-hr composite ²
August	Three/week	24-hr composite	Three/week	24-hr composite ²
September	Three/week	24-hr composite	Three/week	24-hr composite ²
Total Suspended Solids (TSS)	Three/week	24-hr composite	Three/week	24-hr composite ²
Total Recoverable Copper	Once/month	Grab	Once/month	Grab
Total Recoverable Zinc	Once/month	Grab	Once/month	Grab
Total Phosphorous	Once/month	24-hr composite	Once/month	24-hr composite ²
Nitrates as Nitrogen	Once/month	24-hr composite	Once/month	24-hr composite ²
Change in Color of Receiving Stream	Once/quarter	Grab	Once/quarter	Grab
pH	Three/week	Grab	Three/week	Grab
INTERNAL OUTFALLS (101, 102, and 103)				
Flow	Daily	Instantaneous	Daily	Calculated
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	Once/quarter	24-hr composite	Once/quarter	24-hr composite
2,3,7,8-Tetrachlorodebenzofuran (TCDF)	Once/quarter	24-hr composite	Once/quarter	24-hr composite
Trichlorosyringol	Once/quarter	24-hr composite	Once/quarter	24-hr composite
3,4,5-Trichlorocatechol	Once/quarter	24-hr composite	Once/quarter	24-hr composite

Parameter	Previous Permit		Final Permit	
	Frequency of Sample	Sample Type	Frequency of Sample	Sample Type
3,4,6-Trichlorocatechol	Once/quarter	24-hr composite	Once/quarter	24-hr composite
3,4,5-Trichloroguaiacol	Once/quarter	24-hr composite	Once/quarter	24-hr composite
3,4,6-Trichloroguaiacol	Once/quarter	24-hr composite	Once/quarter	24-hr composite
4,5,6-Trichloroguaiacol	Once/quarter	24-hr composite	Once/quarter	24-hr composite
2,4,5-Trichlorophenol	Once/quarter	24-hr composite	Once/quarter	24-hr composite
2,4,6-Trichlorophenol	Once/quarter	24-hr composite	Once/quarter	24-hr composite
Tetrachlorocatechol	Once/quarter	24-hr composite	Once/quarter	24-hr composite
Tetrachloroguaiacol	Once/quarter	24-hr composite	Once/quarter	24-hr composite
2,3,4,6-Tetrachlorophenol	Once/quarter	24-hr composite	Once/quarter	24-hr composite
Pentachlorophenol	Once/quarter	24-hr composite	Once/quarter	24-hr composite
Chloroform	Once/2 months	24-hr composite	Once/2 months	24-hr composite

¹ Sample may consist of four grab samples taken over a 24 hour period and flow weighted.

² Samples shall be time-proportional composites. The permittee must collect a fixed volume of discrete sample aliquots in one container at constant time intervals by mixing a minimum of 4 effluent portions collected at equal time intervals (but not closer than one hour apart) within a 24-hr period.

15. PERMIT COMPLIANCE SCHEDULE.

The permit compliance section of the permit only contains submittal dates for reports required in Part II of the permit. The permittee is required to comply with all permit limits on the effective date of the permit.

The permittee will have three years to comply with the chronic WET limit for *C. dubia* since this is a new limit.

16. MONITORING AND REPORTING.

The applicant is at all times required to monitor the discharge on a regular basis and report the results monthly. The monitoring results will be available to the public.

17. SOURCES.

The following sources were used to draft the permit:

- A. Application No. AR0001210 received May 4, 2015, with all additional information received by May 13, 2016.
- B. Arkansas Water Quality Management Plan (WQMP).
- C. APCEC Regulation No. 2.
- D. APCEC Regulation No. 3.
- E. APCEC Regulation No. 6 which incorporates by reference certain federal regulations included in Title 40 of the Code of Federal Regulations at Reg. 6.104.
- F. 40 CFR Parts 122 and 125.
- G. 40 CFR Part 430.
- H. Discharge permit file AR0001210.
- I. Discharge Monitoring Reports (DMRs).
- J. "2008 Integrated Water Quality Monitoring and Assessment Report", ADEQ.
- K. "2008 List of Impaired Waterbodies (303(d) List)", ADEQ, February 2008.
- L. *[TMDLs for Segments Listed for Mercury in Fish Tissue for the Ouachita River Basin, and Bayou Bartholomew, Arkansas and Louisiana to Columbia](#)* dated December 18, 2002.
- M. Continuing Planning Process (CPP).
- N. Technical Support Document For Water Quality-based Toxic Control.
- O. [Inspection Report](#) dated July 29, 2014.
- P. [Compliance Review Memo](#) from Layne Pemberton to Loretta Reiber, P.E. dated July 6, 2015.
- Q. [Update to Compliance Review Memo](#) dated July 15, 2015.
- R. [Modeling analysis](#) conducted by AquaTer dated April 1999 and [reviewed October 2015](#).
- S. [Site Visit](#) on August 4, 2015, during which changes to the permit were discussed.
- T. E-mail from Bruce Fielding of LDEQ to Loretta Reiber, P.E. dated December 21, 2015.
- U. Title 33, Part IX, Subpart 1 (LDEQ Regulations).
- V. Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, Water Quality Management Plan Volume 3, October 26, 2010 – Version 8.
- W. Meeting at ADEQ with facility personnel on May 5, 2016.
- X. Letter from Sarah Ross to Loretta Reiber, P.E. dated May 6, 2016.
- Y. Letter from Sarah Ross to Loretta Reiber, P.E. dated May 13, 2016.

18. PUBLIC NOTICE AND PUBLIC HEARING.

The public notice describes the procedures for the formulation of final determinations and shall provide for a public comment period of 30 days. During this period, any interested persons may submit written comments on the permit.

The ADEQ will hold a public meeting and hearing at 6:00 p.m. on **XXX**, at the **XXX** to accept comments on the draft permit. At said hearing, all interested parties may submit written or

oral statements regarding the draft NPDES permit to the Hearing Officer for consideration. The purpose of said hearing is to allow public participation in the determination of the terms and conditions of the issuance of the NPDES permit. ADEQ technical staff will be available to informally discuss the draft permit. In addition, a hearing officer will accept public comments during this time. Verbal comments will be accepted, but written comments are preferred in the interest of accuracy.

A copy of the permit and public notice will be sent via email to the Corps of Engineers, the Regional Director of the U.S. Fish and Wildlife Service, the Department of Arkansas Heritage, the EPA, and the Arkansas Department of Health.

19. POINT OF CONTACT.

For additional information, contact:

Loretta Reiber, P.E.
Permits Branch, Office of Water Quality
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317
Telephone: (501) 682-0612



ARKANSAS
Department of Environmental Quality

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (91 7199 9991 7030 4937 1840)

Michael Hohnadel, VP-MFG
Georgia-Pacific Crossett LLC
Crossett Paper Operations
100 Mill Supply Road
Crossett, AR 71635

RE: Discharge Permit Number AR0001210, AFIN 02-00013

Dear Mr. Hohnadel:

Enclosed are the public notice, a copy of the draft permit, and Fact Sheet which the Arkansas Department of Environmental Quality (ADEQ) has prepared and mailed to you on the above date under the authority of the National Pollutant Discharge Elimination System (NPDES) and the Arkansas Water and Air Pollution Control Act. A copy of the final permit will be mailed to you when the Department has made a final permitting decision.

In accordance with Reg. 8.207, the enclosed public notice will be or has been published by ADEQ in a newspaper of general circulation of your facility for one (1) day only. An invoice for the cost of publishing the public notice and proof of publication will be sent to you by the advertising newspaper. The permittee must send proof of publication and proof of payment to the address at the bottom of this letter as soon as possible but no later than 30 days from the above date. Until this Department receives proof of publication of the public notice and payment of all permit fees, no further action will be taken on the issuance of your discharge permit.

For a list of changes, please see Section 5 of the enclosed Fact Sheet. Comments must be received at ADEQ prior to the close of the public comment period as described in the enclosed public notice. Once a final permit is issued by the Director and becomes effective, the permittee must comply with all terms and conditions of the permit, or be subject to enforcement actions for any instances of noncompliance during the duration of the permit, usually five (5) years. Consequently, it is imperative that you, as the applicant, thoroughly review the enclosed documentation for accuracy, applicability, and your ability to comply with all conditions therein.

Should you have any questions concerning any part of the draft permit, please contact Loretta Reiber, P.E. at (501) 682-0612.

Sincerely,

EPA – major and ELGs, Louisiana

Caleb J. Osborne
Associate Director, Office of Water Quality

CJO:lr

Enclosure

PUBLIC NOTICE OF DRAFT DISCHARGE PERMIT
AND PUBLIC HEARING
PERMIT NUMBER AR0001210, AFIN 02-00013

In accordance with Ark. Code Ann. § 8-4-203(e), the Arkansas Department of Environmental Quality (ADEQ), Office of Water Quality, gives the following notice:

Georgia-Pacific LLC - Crossett Paper Operations operates a facility located as follows: 100 Mill Supply Road, Crossett, AR 71635 in Ashley County. The facility is currently permitted to discharge process wastewater (Pulp and Paper Mill, Plywood Plant and Studmill, and Chemical Plant operations including, but not limited to, truck wash wastewater, backwash wastewater, and product stewardship waters), sanitary wastewater, landfill leachate, site stormwater, and treated effluent from the City of Crossett into the upper reaches of Mossy Lake, then into Coffee Creek, then into the Ouachita River in Segment 2D of the Ouachita River Basin. Georgia-Pacific LLC - Crossett Paper Operations submitted an application on May 4, 2015, with all additional information submitted by May 13, 2016, to renew NPDES Permit No. AR0001210. The application has been reviewed by the ADEQ's Office of Water Quality and has received tentative approval subject to the terms of this notice.

Citizens wishing to examine or obtain copies of the permit application, the draft permitting decision, or the Fact Sheet may do so at the ADEQ headquarters located at 5301 Northshore Drive, North Little Rock, AR 72118-5317. To request a hard copy of one or more of the documents to be mailed, please call (501) 682-0623. For those with Internet access, a copy of the proposed draft permit as well as the publication date may be found on the ADEQ's website at: https://www.adeq.state.ar.us/water/permits/drafts_pn.aspx

The ADEQ will hold a public meeting and hearing at 6:00 p.m. on **XXX**, at the **XXX** to accept comments on the draft permit. At said hearing, all interested parties may submit written or oral statements regarding the draft NPDES permit to the Hearing Officer for consideration. The purpose of said hearing is to allow public participation in the determination of the terms and conditions of the issuance of the NPDES permit. ADEQ technical staff will be available to informally discuss the draft permit. In addition, a hearing officer will accept public comments during this time. Verbal comments will be accepted, but written comments are preferred in the interest of accuracy.

Comments on the draft permit will be accepted in accordance with Arkansas Pollution Control and Ecology Commission Reg. 8.208. ADEQ's contact person for submitting written comments on the draft permit, is Loretta Reiber, P.E., at the above address and telephone number or by email at Water-Draft-Permit-Comment@adeq.state.ar.us.

The comment period for the draft permit shall begin on the date of publication of the public notice and end at 4:30 P.M. (Central Time) on the 30th day after the publication date. Comments will also be accepted at the public hearing. If the last day of the comment period is a Saturday, Sunday, or legal holiday, the public comment period shall expire on the next day that is not a Saturday, Sunday, or legal holiday. For information regarding the actual publication date along with the actual date and time the comment period will end, please contact Loretta Reiber, P.E. at the above address and telephone number or by email at Water-Draft-Permit-Comment@adeq.state.ar.us. Public notice, comments, and hearings will be conducted in accordance with Regulation 6.104(A)(5) [40 CFR Parts 124.10 through 124.12 by reference] and Regulation 8.207 through 8.210 (Administrative Procedures). All persons, including the permittee, who wish to comment on ADEQ's draft permitting decision must submit written comments to ADEQ, along with their name and mailing address. After the public comment period, ADEQ will issue a final permitting decision. ADEQ will notify the applicant and each person who has submitted written comments or request notice of the final permitting decision. Any interested person who has submitted comments may appeal a final decision by ADEQ in accordance with the APC&EC Regulation No. 8.603.